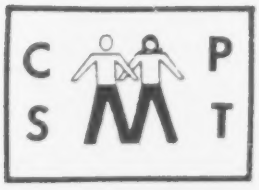
# PROFESSIONAL WOMEN AND MINORITIES

## A Manpower Data Resource Service




COMMISSION ON PROFESSIONALS IN SCIENCE AND TECHNOLOGY
1500 Massachusetts Avenue, N.W., Suite 831
Washington, DC 20005

Seventh Edition

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## FOREWORD

This book is designed to provide current and historical statistics about the professional segment of the U.S. population and particularly the participation and availability of women and minorities in those areas which generally require formal education to at least the baccalaureate level. Because more information is available in some fields than in others, the comprehensiveness of coverage varies. While we have attempted to locate all available data sources, and to provide the most current statistics available, we welcome notification of any data that we may have missed. Between annual editions, new data are published regularly in MANPOWER COMMENTS, a periodical digest available from the Commission on Professionals in Science and Technology.

We wish to thank those professional associations, women's groups and individuals who have responded to our request for current information or data, and for their permission to use that data in this compilation. We also express our appreciation to the more than 2,500 users of the earlier editions for their continued interest in the data both to measure their progress and to formulate plans.

Our special thanks go to the Ford Foundation for a grant which supported the final six months of work in collecting, assembling, reviewing and publishing the first edition of this book in 1975. Without that first edition, this continuing data source would not have been possible. We also acknowledge with thanks the special assistance of Richard Vetter.

Betty M. Vetter and Eleanor L. Babco

## INTRODUCTION

### Organization of the Book

The data tables are organized in ten chapters, and tables are numbered consecutively within each chapter.

The Table of Contents outlines both the chapter arrangement and the organization of tables within the chapter. The first five chapters on general enrollments, general degrees, general professions, general workforce and academic workforce include both tables which do not specify subject fields and tables where several subject fields are included. In the section on general professions, data for individual professions such as business administration and law follow tables that include data for multiple fields.

The organization of tables in chapters six through ten, which are devoted to subject fields, provide data on degrees (doctorates first) followed by enrollments, general workforce, academic workforce and federal workforce participation. Except for tables which include both sex and minority proportions, those which delineate the population by sex generally precede those which delineate by minority status.

When the field is designated at the top of the page, table headings do not necessarily include the name of the field.

When the year or years covered by the table are included within the table, the dates are not always repeated in the table title.

The **Index** is by page number. The Index, rather than the Table of Contents, is the place to begin a search for data in a particular field, since enrollment, degree and employment information about that field will also be found in the early chapters. Cross-indexing allows finding the data references in a number of ways.

The source or sources of data for each table are noted above the table. The bibliography, organized alphabetically by publisher, provides specific information about each source.

### The Data

More than 200 published and previously unpublished data sources were used to prepare the statistical tables and charts in this book, including reports and other materials from government agencies, professional associations and women's and/or minority groups and caucuses. The source or sources for each table appear at the top of the table, with the full bibliographic entry provided in the Bibliography.

Generally, exact correlation of results of different surveys is not possible since it is rare to find two data sources with exactly the same time and population base. Different results occur because of differences in the survey populations, in the time frames, in the way similar questions were asked, in terminology, in analysis, or in the type of respondent. For example, degree data collected by the Center for Education Statistics is obtained from college and university registrars, while that collected by the professional societies generally comes from department heads and that collected by the National Research Council comes from the doctorate recipients themselves. Thus, while degree data will be similar, it is not identical from one source to another, usually because of differences in field taxonomy.

Different methods of analysis, particularly in data on minorities, also will produce different statistical results. The several problems for the data analyst include the method of treatment for non-respondents, the respondents who list multiple minority status, responses from a third party rather than from the individuals themselves, inclusion or exclusion of non-citizens in the survey population or unrepresentative population samples.

Differences in treatment of non-respondents to questions of sex or ethnicity may produce large statistical differences in calculating the proportion of minorities or women within a particular population.

Some surveys assume that non-respondents to the sex or ethnic question are in the same proportion as respondents, and remove all non-respondents before calculating the percentages of women and minority participants. Still others calculate percentages from a total which includes non-respondents, thus giving a lower percentage for minorities than may be the case. Additionally, many studies dealing with minority populations do not separate foreign nationals from U.S. citizens or those eligible for citizenship. This single factor, particularly within the Asian minority among scientists and engineers, changes the sex and minority proportion substantially, as does the inclusion of foreign nationals in the base numbers for enrollments and degrees in such graduate fields as engineering. This edition includes more data than were previously available on citizenship, particularly in the science and engineering fields.

In most data sets, minority data are not subdivided by sex, and conversely data on women fail to distinguish majority from minority women. Thus, the availability of minority women in specific fields is often difficult to determine. Where available, we have included both the sex and minority subdivision.

This book does not attempt to determine which data are more likely to be correct when differences occur, but when available, the population base used for calculating the percentages is indicated in the table title or footnotes.

### Correlating Degree and Workforce Data

There are frequently fairly major differences between the proportions of degrees granted to women and minorities in any particular field and the proportions of those persons found in the workforce for that field. This may occur because of field switching, differences in nomenclature between degree fields and job titles, and because of the problems of similar but non-identical population bases outlined above. The lower proportion of women in a working population than their proportion of earned degrees may also indicate that proportionally more women than men have left the workforce in that field either temporarily or permanently. Some data sets show that women are somewhat less likely than men to find employment that is linked with their major field of study, particularly among recent graduates. Tables showing underemployment are included.

Few data are available on the workforce participation of women and minorities in the arts, humanities and education. One reason is that persons with degrees in those fields may appear in almost any occupation in the workforce, and are generally classed in the same field as the degree field only when they are in the academic workforce.

In many instances, this book incorporates both historical and current ta so that progress may be measured and changing trend lines incorporated in planning for the future. In some cases, we have included older data because nothing more current could be obtained. However, in this edition, we have dropped most tables where the most recent data available are for 1983 or earlier.

Through the wording of table headings and the use of footnotes to tables, we have tried to offer as much information as possible regarding the inclusiveness of the data in any table. Usually a more comprehensive explanation of methodology can be found in the original data source which is listed in the Bibliography. A single source for much of the information is Guide to Data on Scientists and Engineers, (Scientific Manpower Commission, 1984), available in all university libraries. Research groups or other libraries may request a copy from the Commission on Professionals in Science and Technology.

### Terminology for Minority Groups

Only in the past few years has a common set of designations for minority populations come into general use. In this book, tables generally use the terminology of the original source from which the table was derived.

## AFFIRMATIVE ACTION

Federal laws and regulations prohibit discrimination in conditions of employment including recruitment, hiring, lay-off, discharge and recall, and in-service training; opportunities for promotion; participation in training programs; wages and salaries; sick leave time and pay; vacation time and pay; over-time work and pay; medical, hospital, life and accident insurance; and optional and compulsory retirement.

### Statutes and Orders Requiring Equal Employment Opportunity and Affirmative Action

The Equal Pay Act of 1963, the first sex discrimination legislation enacted, requires equal pay for equal work regardless of sex. Title IX of the Education Amendments Act of 1972 extends the coverage to executive, administrative and professional employees, including all faculty; and to outside sales people.

Executive Order 11246 as amended by Executive Orders 11375 and 12086 prohibits discrimination in employment by all employers who hold federal contracts, and requires affirmative action programs by all federal contractors and sub-contractors. Firms with contracts over $100,000 and with 100 or more employees must develop and implement written programs of affirmative action.

Title VI of the Civil Rights Act of 1964 forbids discrimination against students on the basis of race, color, or national origin in all federally assisted programs. Employment is not generally covered except when employment is the purpose of the assistance.

Title VII of the Civil Rights Act of 1964 as amended by the Equal Employment Opportunity Act of 1972 forbids discrimination on the basis of race, color, national origin, religion or sex in any term, condition of privilege of employment, including sexual harassment, by unions, employment agencies and employers. The law was amended on March 24, 1972 to cover all public and private educational institutions, as well as state and local governments. It applies to all employers, public or private, whether or not they recieve any federal funds. Title VII covers all private employers of fifteen or more persons.

Title IX of the Education Amendments of 1972 forbids discrimination on the basis of sex in all federally assisted education programs in all institutions, public and private, that receive federal monies through grants, loans or contracts. The Supreme Court determined in the Spring of 1982 that Title IX's prohibition of sex discrimination applies to both students and employees of educational institutions. Title IX Regulations have been applied broadly to activities "assisted or benefited by federal funds," but the Supreme Court ruled in March 1984 that Title IX applies only to programs or activities that receive direct federal support, rather than to entire institutions. What constitutes a "program" or "activity" was not addressed. Legislation has been introduced in both the House and Senate to apply Title IX to all activities, education programs and educational institutions; and also would broaden the coverage of Title VI of the Civil Rights Act of 1964 and Section 504 of the Vocational Rehabilitation Act.

Section 504 of the Vocational Rehabilitation Act of 1973 prohibits discrimination against handicapped persons by federal contractors, and requires such contractors to take affirmative action to employ such persons.

### Regulation and Enforcement

Prior to 1978, a number of federal agencies were variously responsible for writing regulations to govern these orders and statutes and to enforce the regulations. These agencies included the Labor Department, the Justice Department, the Department of Health, Education and Welfare, and the Equal Employment Opportunity Commission which is appointed by the President.

On February 23, 1978, President Carter submitted to Congress a plan to reorganize federal equal employment opportunity enforcement activities. EEOC is the principal agency responsible for enforcement for all public and private non-federal employers and unions, and within the federal government. EEOC took over from the Labor Department on July 1, 1979 enforcement of the Equal Pay Act and the Age Discrimination Act.

Enforcement of Executive Order 11246 as amended by Executive Order 12086 and Executive Order 11375 remains with the Office of Federal Contract Compliance Programs (OFCCP) in the Department of Labor. All federal contractors deal with OFCCP.

The Justice Department continues to have responsibility for litigation against state and local governments under Title VII, and represents the government in suits against federal contractors. The Attorney General may initiate "pattern and practice" suits under Title VII in the public sector.

The Department of Education enforces compliance with Title IX.

EEOC, the Justice Department and the Labor Department published final regulations for uniform employment guidelines which became effective September 25, 1978. The regulations are published as Part IV in the August 25, 1978 issue of the Federal Register. New regulations based on the amended Executive Order eliminate pre-contract award compliance review, and limit suits to "identifiable victims of bias" rather than allowing broad, class action suits for unnamed individuals who might have been affected.

**What is Affirmative Action?**

Broadly speaking, affirmative action consists of actions to end discrimination and to remedy the effects of past discrimination. It includes such activities as notifying women's and minority groups about job openings, advertising job openings rather than relying on word-of-mouth notification, developing recruitment procedures aimed at women and minorities as well as other qualified applicants, and providing equal opportunities for advancement.

Affirmative Action under Executive Order 11246 also requires establishment of an Affirmative Action Plan which includes numerical goals and time tables for increasing the participation of women and/or minorities.

Goals are targets for the inclusion of people previously excluded, and are an attempt to estimate the composition of the employer's workforce if there were no illegal discrimination based on race or sex. In general, goals for professional positions are aligned with the number or percentage of qualified women or minorities available rather than with their general representation within the population.

Quotas, on the other hand, are illegal unless assigned by a court as the result of a finding of discrimination, since they are in themselves discriminatory and act to keep some qualified people out of the applicant pool to be considered.

Under the Executive Order, all job classifications must be reviewed in order to identify under-utilization of women and minorities. Data should be provided simultaneously on race and sex. If current recruitment practices have resulted in a "significantly lower representation" of women and minorities in the applicant pool than would be expected from their availability in the labor force, then new sources of recruitment must be developed. An employer is assumed to be utilizing "reasonable" numbers of persons in protected classes if his workforce includes at least 80 percent of their representation within the eligible populations.

Affirmative action plans are required to include a system of accountability and monitoring. This system may be centralized in an institution-wide or a corporation-wide office which maintains records and monitors individual units or departments and makes an annual report; or in individual units or departments which may maintain records separately of all applicants and hires as well as records of the efforts made to recruit women and minorities. In either case, records should allow for an ongoing analysis of all employment decisions in recruiting, hiring, promoting and setting salaries.

The employer sets the criteria for every job, both in terms of the level of academic preparation required, experience and other factors. The criteria must be applied equally to men and women and to those of all ethnic backgrounds. They must be clearly related to the job to be filled, and they must not in themselves be discriminatory.

The Uniform Guidelines on Employee Selection Procedures protect the rights of workers to be hired and promoted on the basis of job-related standards and without regard to race, sex or national origin. These guidelines apply to all employers, public and private, including academic institutions. Their underlying principle is that tests and other selection procedures that have an adverse impact on minorities and women are illegal unless validated by showing a clear relation between performance on the test and performance on the job. The guidelines adopt a "rule of thumb" as a practical but not absolute, means of determining whether there has been an adverse impact. Generally, a selection rate for any race, sex or ethnic group which is less than 80% of the rate for the group with the highest selection rate is regarded as adverse impact. For professional positions in which women or minorities represent less than 20% of the available pool, statistical evidence of such proportions will be necessary.

Evidence of the validity of a selection procedure generally is not required if there is no adverse impact. The guidelines provide that, in considering whether to take enforcement action, the government will take into account the general posture of the employer regarding equal employment opportunity, including its affirmative action plan and the results achieved under the plan.

Numerical goals have been upheld in the courts as relief for a substantiated pattern of discrimination. Each goal is tailor-made to a specific situation, taking into account expected turnover, vacancies, promotions and the availability of qualified women and minorities. The goal varies for different job classifications and may be general as for "chemists" or more specific as for "doctoral organic chemists."

If an institution fails to meet its goals, and if adverse impact on women or minorities is indicated by its results, that institution must show that it has made a good faith effort to recruit, hire and promote qualified women and minorities; and it must be able to produce records documenting these efforts.

If the best qualified person is white and male, that person can be hired. However, if called upon to do so, the employer must be able to demonstrate that a genuine good faith effort has been made to recruit qualified women and minorities; that objective, job-related criteria were specified before the hiring process; and that these criteria have been applied equally to women, minorities and white men.

Some regulations issued during previous administrations are still under review, which may bring about changes in regulations outlined here.

SOURCE: National Center for Health Statistics, Personal Communication

## TABLE 1-1

### LIVE BIRTHS IN THE U.S. BY SEX: 1933-1985

| YEAR | TOTAL | MALE | FEMALE |
|---|---|---|---|
| 1933 | 2,081,232 | 1,068,871 | 1,012,361 |
| 1934 | 2,167,636 | 1,112,703 | 1,054,933 |
| 1935 | 2,155,105 | 1,105,489 | 1,049,616 |
| 1936 | 2,144,790 | 1,099,465 | 1,045,325 |
| 1937 | 2,203,337 | 1,130,641 | 1,072,696 |
| 1938 | 2,286,962 | 1,172,541 | 1,114,421 |
| 1939 | 2,265,558 | 1,162,600 | 1,102,988 |
| 1940 | 2,360,399 | 1,211,684 | 1,148,715 |
| 1941 | 2,513,427 | 1,289,734 | 1,223,693 |
| 1942 | 2,808,996 | 1,444,365 | 1,364,631 |
| 1943 | 2,936,860 | 1,508,959 | 1,427,901 |
| 1944 | 2,794,800 | 1,435,301 | 1,359,499 |
| 1945 | 2,735,456 | 1,404,587 | 1,330,869 |
| 1946 | 3,288,672 | 1,691,220 | 1,597,452 |
| 1947 | 3,699,940 | 1,899,876 | 1,800,064 |
| 1948 | 3,535,068 | 1,813,852 | 1,721,216 |
| 1949 | 3,559,529 | 1,826,352 | 1,733,177 |
| 1950 | 3,554,149 | 1,823,555 | 1,730,594 |
| 1951 | 3,750,850 | 1,923,020 | 1,827,830 |
| 1952 | 3,846,986 | 1,971,262 | 1,875,724 |
| 1953 | 3,902,120 | 2,001,798 | 1,900,322 |
| 1954 | 4,017,362 | 2,059,068 | 1,958,294 |
| 1955 | 4,047,295 | 2,073,719 | 1,973,576 |
| 1956 | 4,163,090 | 2,133,588 | 2,029,502 |
| 1957 | 4,254,784 | 2,179,960 | 2,074,824 |
| 1958 | 4,203,812 | 2,152,546 | 2,051,266 |
| 1959 | 4,244,796 | 2,173,638 | 2,071,158 |
| 1960 | 4,257,850 | 2,179,708 | 2,078,142 |
| 1961 | 4,268,326 | 2,186,274 | 2,082,052 |
| 1962 | 4,167,362 | 2,132,466 | 2,034,896 |
| 1963 | 4,098,020 | 2,101,632 | 1,996,388 |
| 1964 | 4,027,490 | 2,060,162 | 1,967,328 |
| 1965 | 3,760,358 | 1,927,054 | 1,833,304 |
| 1966 | 3,606,274 | 1,845,862 | 1,760,412 |
| 1967 | 3,520,959 | 1,803,388 | 1,717,571 |
| 1968 | 3,501,564 | 1,796,326 | 1,705,238 |
| 1969 | 3,600,206 | 1,846,572 | 1,753,634 |
| 1970 | 3,731,386 | 1,915,378 | 1,816,008 |
| 1971 | 3,555,970 | 1,822,910 | 1,733,060 |
| 1972 | 3,258,411 | 1,669,927 | 1,588,484 |
| 1973 | 3,136,965 | 1,608,326 | 1,528,639 |
| 1974 | 3,159,958 | 1,622,114 | 1,537,844 |
| 1975 | 3,144,198 | 1,613,135 | 1,531,063 |
| 1976 | 3,167,788 | 1,624,436 | 1,543,352 |
| 1977 | 3,326,632 | 1,705,916 | 1,620,716 |
| 1978 | 3,333,279 | 1,709,394 | 1,623,885 |
| 1979 | 3,494,398 | 1,791,267 | 1,703,131 |
| 1980 | 3,612,258 | 1,852,616 | 1,759,642 |
| 1981 | 3,629,238 | 1,860,272 | 1,768,966 |
| 1982 | 3,680,537 | 1,885,676 | 1,794,861 |
| 1983 | 3,638,933 | 1,865,553 | 1,773,380 |
| 1984 | 3,669,141 | 1,879,490 | 1,789,651 |
| 1985 | 3,760,561 | 1,927,983 | 1,832,578 |

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 1-2

## HIGH SCHOOL GRADUATES COMPARED WITH POPULATION 17 YEARS OF AGE, BY SEX AND CONTROL, 1869-70 - 1984-85

[Numbers in thousands]

| School year | Population 17 years old[1] | High school graduates | | | | | Graduates as a percent of 17-year-old population |
|---|---|---|---|---|---|---|---|
| | | Total[2] | Sex | | Control | | |
| | | | Men | Women | Public[3] | Private[4] | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1869-70 | 815 | 16 | 7 | 9 | --- | --- | 2.0 |
| 1879-80 | 946 | 24 | 11 | 13 | --- | --- | 2.5 |
| 1889-90 | 1,259 | 44 | 19 | 25 | 22 | 22 | 3.5 |
| 1899-1900 | 1,489 | 95 | 38 | 57 | 62 | 33 | 6.4 |
| 1909-10 | 1,786 | 156 | 64 | 93 | 111 | 45 | 8.8 |
| 1919-20 | 1,855 | 311 | 124 | 188 | 231 | 80 | 16.8 |
| 1929-30 | 2,296 | 667 | 300 | 367 | 592 | 75 | 29.0 |
| 1939-40 | 2,403 | 1,221 | 579 | 643 | 1,143 | 78 | 50.8 |
| 1947-48 | 2,261 | 1,190 | 563 | 627 | 1,073 | 117 | 52.6 |
| 1949-50 | 2,034 | 1,200 | 571 | 629 | 1,063 | 136 | 59.0 |
| 1951-52 | 2,086 | 1,197 | 569 | 627 | 1,056 | 141 | 57.4 |
| 1953-54 | 2,135 | 1,276 | 613 | 664 | 1,129 | 147 | 59.8 |
| 1955-56 | 2,242 | 1,415 | 680 | 735 | 1,252 | 163 | 63.1 |
| 1956-57 | 2,272 | 1,434 | 690 | 744 | 1,270 | 164 | 63.1 |
| 1957-58 | 2,325 | 1,506 | 725 | 781 | 1,332 | 174 | 64.8 |
| 1958-59 | 2,458 | 1,627 | 784 | 843 | 1,435 | 192 | 66.2 |
| 1959-60 | 2,672 | 1,858 | 895 | 963 | 1,627 | 231 | 69.5 |
| 1960-61 | 2,892 | 1,964 | 955 | 1,009 | 1,725 | 239 | 67.9 |
| 1961-62 | 2,768 | 1,918 | 938 | 980 | 1,678 | 240 | 69.3 |
| 1962-63 | 2,740 | 1,943 | 956 | 987 | 1,710 | 233 | 70.9 |
| 1963-64 | 2,978 | 2,283 | 1,120 | 1,163 | 2,008 | 275 | 76.7 |
| 1964-65 | 3,684 | 2,658 | 1,311 | 1,347 | 2,360 | 298 | 72.1 |
| 1965-66 | 3,489 | 2,665 | 1,323 | 1,342 | 2,367 | 298 | 76.4 |
| 1966-67 | 3,500 | 2,672 | 1,328 | 1,344 | 2,374 | 298 | 76.3 |
| 1967-68 | 3,532 | 2,695 | 1,338 | 1,357 | 2,395 | 300 | 76.3 |
| 1968-69 | 3,659 | 2,822 | 1,399 | 1,423 | 2,522 | 300 | 77.1 |
| 1969-70 | 3,757 | 2,889 | 1,430 | 1,459 | 2,589 | 300 | 76.9 |
| 1970-71 | 3,872 | 2,937 | 1,454 | 1,483 | 2,637 | 300 | 75.9 |
| 1971-72 | 3,973 | 3,001 | 1,487 | 1,514 | 2,699 | 302 | 75.5 |
| 1972-73 | 4,049 | 3,036 | 1,500 | 1,536 | 2,730 | 306 | 75.0 |
| 1973-74 | 4,132 | 3,073 | 1,512 | 1,561 | 2,763 | 310 | 74.4 |
| 1974-75 | 4,256 | 3,133 | 1,542 | 1,591 | 2,823 | 310 | 73.6 |
| 1975-76 | 4,272 | 3,148 | 1,552 | 1,596 | 2,837 | 311 | 73.7 |
| 1976-77 | 4,272 | 3,155 | 1,548 | 1,607 | 2,840 | 315 | 73.9 |
| 1977-78 | 4,286 | 3,127 | 1,531 | 1,596 | 2,825 | 302 | 73.0 |
| 1978-79 | 4,327 | 3,117 | 1,523 | 1,594 | 2,817 | 300 | 72.0 |
| 1979-80 | 4,262 | 3,043 | 1,491 | 1,552 | 2,748 | 295 | 71.4 |
| 1980-81 | 4,207 | 3,020 | 1,483 | 1,537 | 2,725 | 295 | 71.8 |
| 1981-82 | 4,121 | 3,001 | 1,474 | 1,527 | 2,711 | 290 | 72.8 |
| 1982-83 | 3,939 | 2,888 | 1,437 | 1,451 | 2,598 | 290 | 73.3 |
| 1983-84[5] | 3,753 | 2,773 | --- | --- | 2,501 | 272 | 73.9 |
| 1984-85[6] | 3,658 | 2,683 | --- | --- | 2,420 | 263 | 73.3 |

[1]Derived from *Current Population Reports*, Series P-25 of the Bureau of the Census, U.S. Department of Commerce.

[2]Includes graduates of public and private schools.

[3]Data for 1929-30 and preceding years are from *Statistics of Public High Schools* and exclude graduates of high schools which failed to report to the Office of Education.

[4]For most years, private school data have been estimated based on periodic private school surveys. For years through 1957-58, private includes data for subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools.

[5]Data have been revised from previously published figures.

[6]Preliminary data.

---Data not available.

NOTE.—Includes graduates of regular day school programs. Excludes graduates of other programs, when separately reported, and recipients of high school equivalency certificates. Some of the figures have been revised slightly since originally published.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public High Schools, Biennial Survey of Education in the United States, Statistics of State School Systems, Statistics of Nonpublic Elementary and Secondary Schools*, and Center for Education Statistics, unpublished data. (This table was prepared October 1986.)

SOURCE: The Condition of Education, 1986 Edition, Department of Education Center for Statistics

TABLE 1-3

HIGH SCHOOL COMPLETION RATES BY RACE, HISPANIC ORIGIN, AND AGE GROUP, 1974-1985

| Year | Age: 18 to 19 | | | | Age: 20 to 24 | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | White | Black | Hispanic[1] | Total | White | Black | Hispanic[1] |
| | Percentage of age group | | | | Percentage of age group | | | |
| 1974 | 73.4 | 76.2 | 55.8 | 48.9 | 83.9 | 85.6 | 72.5 | 59.0 |
| 1975 | 73.7 | 77.0 | 52.8 | 50.0 | 83.9 | 85.9 | 70.5 | 61.3 |
| 1976 | 73.1 | 75.4 | 58.2 | 50.9 | 83.7 | 85.4 | 71.9 | 58.0 |
| 1977 | 72.9 | 75.7 | 54.9 | 50.7 | 83.7 | 85.1 | 73.4 | 56.6 |
| 1978 | 73.5 | 76.3 | 54.9 | 48.9 | 83.7 | 85.2 | 73.5 | 58.7 |
| 1979 | 72.8 | 75.3 | 56.4 | 53.7 | 83.2 | 84.9 | 71.8 | 55.8 |
| 1980 | 73.7 | 76.1 | 59.3 | 46.1 | 83.8 | 85.1 | 74.3 | 57.1 |
| 1981 | 72.5 | 74.8 | 59.6 | 47.2 | 83.7 | 85.0 | 75.7 | 59.3 |
| 1982 | 72.0 | 74.5 | 58.2 | 51.7 | 84.1 | 85.4 | 76.2 | 60.2 |
| 1983 | 72.7 | 75.6 | 59.1 | 50.3 | 83.3 | 84.6 | 75.8 | 56.6 |
| 1984 | 73.3 | 75.5 | 63.0 | 58.3 | 84.6 | 85.7 | 79.3 | 60.7 |
| 1985 | 74.6 | 76.7 | 62.7 | 49.8 | 85.3 | 86.0 | 80.8 | 67.3 |

[1]Most of the year-to-year differences in completion rates for Hispanics are not statistically significant due to the small size of the Hispanic sample.

NOTE: Asians are not included in the analysis because they are not identifiable from the October Current Population Survey data tapes.

TABLE 1-4

HIGHER EDUCATION PARTICIPATION RATES OF 18-24 YEAR OLDS, BY RACE/ETHNICITY, 1970-85

| Year | Racial/ethnic group | | |
|---|---|---|---|
| | White | Black | Hispanic |
| | Percent enrolled | | |
| 1970 | 27.1 | 18.7 | — |
| 1971 | 27.2 | 18.2 | — |
| 1972 | 26.4 | 18.1 | 13.4 |
| 1973 | 25.0 | 16.0 | 16.0 |
| 1974 | 25.2 | 17.9 | 18.1 |
| 1975 | 26.9 | 20.7 | 20.4 |
| 1976 | 27.1 | 22.6 | 19.9 |
| 1977 | 26.5 | 21.3 | 17.2 |
| 1978 | 25.7 | 20.1 | 15.2 |
| 1979 | 25.6 | 19.8 | 16.6 |
| 1980 | 26.4 | 19.4 | 16.1 |
| 1981 | 26.7 | 19.9 | 16.7 |
| 1982 | 27.2 | 19.8 | 16.8 |
| 1983 | 27.0 | 19.2 | 17.2 |
| 1984 | 28.0 | 20.4 | 17.9 |
| 1985 | 28.7 | 19.7 | 16.9 |

SOURCE: Admissions Testing Program of the College Board

## TABLE 1-5

SAT SCORE AVERAGES FOR COLLEGE-BOUND SENIORS BY SEX, 1970-87

| Year | VERBAL | | | MATHEMATICS | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| 1970 | 459 | 461 | 460 | 509 | 465 | 488 |
| 1971 | 454 | 457 | 455 | 507 | 466 | 488 |
| 1972 | 454 | 452 | 453 | 505 | 461 | 484 |
| 1973 | 446 | 443 | 445 | 502 | 460 | 481 |
| 1974 | 447 | 442 | 444 | 501 | 459 | 480 |
| 1975 | 437 | 431 | 434 | 495 | 449 | 472 |
| 1976 | 433 | 430 | 431 | 497 | 446 | 472 |
| 1977 | 431 | 427 | 429 | 497 | 445 | 470 |
| 1978 | 433 | 425 | 429 | 494 | 444 | 468 |
| 1979 | 431 | 423 | 427 | 493 | 443 | 467 |
| 1980 | 428 | 420 | 424 | 491 | 443 | 466 |
| 1981 | 430 | 418 | 424 | 492 | 443 | 466 |
| 1982 | 431 | 421 | 426 | 493 | 443 | 467 |
| 1983 | 430 | 420 | 425 | 493 | 445 | 468 |
| 1984 | 433 | 420 | 426 | 495 | 449 | 471 |
| 1985 | 437 | 425 | 431 | 499 | 452 | 475 |
| 1986 | 437 | 426 | 431 | 501 | 451 | 475 |
| 1987 | 437 | 425 | 431 | 499 | 452 | 475 |

Note: Scores range from 200 to 800.

## TABLE 1-6

SAT SCORES OF INTENDED SCIENCE/ENGINEERING MAJORS, 1987

| Field | % of All | %M/F | SAT-V | SAT-M |
|---|---|---|---|---|
| Agric/Nat Res. | 1.2% | 58/42 | 416 | 446 |
| Biological Sci. | 3.1 | 46/54 | 476 | 517 |
| Computer/Info Sci. | 3.4 | 65/35 | 403 | 476 |
| Engineering | 10.1 | 84/16 | 456 | 554 |
| Mathematics | 0.7 | 52/48 | 475 | 602 |
| Physical Sci. | 1.3 | 70/30 | 507 | 576 |
| Social Sci./History | 9.9 | 35/65 | 465 | 483 |

SOURCE: Admissions Testing Program of the College Board

## TABLE 1-7

S.A.T. SCORES BY RACE OR ETHNIC GROUP, 1976 - 1987

| YEAR | ALL SCORES | | WHITE | | BLACK | | ASIAN | | NATIVE AM. | | MEXICAN AM. | | PUERTO RICAN | | OTHER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Verbal | Math | Verbal | Math | Verbal | Math | Verbal | Math | Verbal | Math | Verbal | Math | Verbal | Math | Verbal | Math |
| 1976 | 431 | 472 | 451 | 493 | 332 | 354 | 414 | 518 | 388 | 420 | 371 | 410 | 364 | 401 | 410 | 458 |
| 1977 | 429 | 470 | 448 | 489 | 330 | 357 | 405 | 514 | 390 | 421 | 370 | 408 | 355 | 397 | 402 | 457 |
| 1978 | 429 | 468 | 446 | 485 | 332 | 354 | 401 | 510 | 387 | 419 | 370 | 402 | 349 | 388 | 399 | 450 |
| 1979 | 427 | 467 | 444 | 483 | 330 | 358 | 396 | 511 | 386 | 421 | 370 | 410 | 345 | 388 | 393 | 447 |
| 1980 | 424 | 466 | 442 | 482 | 330 | 360 | 396 | 509 | 390 | 426 | 372 | 413 | 350 | 394 | 394 | 449 |
| 1981 | 424 | 466 | 442 | 483 | 332 | 362 | 397 | 513 | 391 | 425 | 373 | 415 | 353 | 398 | 388 | 447 |
| 1982 | 426 | 467 | 444 | 483 | 341 | 366 | 398 | 513 | 388 | 424 | 377 | 416 | 360 | 403 | 392 | 449 |
| 1983 | 425 | 468 | 443 | 484 | 339 | 369 | 395 | 514 | 388 | 425 | 375 | 417 | 358 | 403 | 386 | 446 |
| 1984 | 426 | 471 | 445 | 487 | 342 | 373 | 398 | 519 | 390 | 427 | 376 | 420 | 358 | 405 | 388 | 450 |
| 1985 | 431 | 475 | 449 | 491 | 346 | 376 | 404 | 518 | 392 | 428 | 382 | 426 | 368 | 409 | 391 | 448 |
| 1987 | 430 | 476 | 447 | 489 | 351 | 377 | 405 | 521 | 393 | 432 | 379 | 424 | 360 | 400 | 455 | 453 |

Note: SAT scores were not available by ethnic group prior to 1976. In 1986, these data were not available due to changes in the student descriptive questionnaire (SDQ). In 1987, a category of "Other Hispanic" was added. Their SAT-V average was 387 and SAT-M average 432.

## TABLE 1-8

ETHNIC BACKGROUND (1984-85 SDQ Question 37)

| | MALE | | FEMALE | | TOTAL | |
|---|---|---|---|---|---|---|
| | Number | % | Number | % | Number | % |
| American Indian | 2,079 | 0.5 | 2,563 | 0.5 | 4,642 | 0.5 |
| Black | 31,690 | 7.5 | 47,866 | 10.1 | 79,556 | 8.9 |
| Mexican-American | 9,131 | 2.2 | 10,395 | 2.2 | 19,526 | 2.2 |
| Oriental | 21,678 | 5.1 | 20,959 | 4.4 | 42,637 | 4.8 |
| Puerto Rican | 5,077 | 1.2 | 6,000 | 1.3 | 11,077 | 1.2 |
| White | 342,079 | 81.0 | 373,694 | 79.1 | 715,773 | 80.0 |
| Other | 10,716 | 2.5 | 10,839 | 2.3 | 21,555 | 2.4 |
| Number Responding | 422,450 | | 472,316 | | 894,766 | 100.0 |
| Minority Students | 80,371 | 19.0 | 98,622 | 20.9 | 178,993 | 20.0 |

SOURCE: Profiles: College Bound Seniors, 1985 and National Summary, College Bound Seniors 1986, Admissions Testing Program of the College Board

## TABLE 1-9

SCHOLASTIC APTITUDE TEST SCORES BY SEX AND RACIAL/ETHNIC GROUP, 1981-85

| Sex and Year | White M | White F | Black M | Black F | Asian M | Asian F | Native Am. M | Native Am. F | Mexican Am. M | Mexican Am. F | Puerto Rican M | Puerto Rican F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VERBAL | | | | | | | | | | | | |
| 1981 | 447 | 437 | 341 | 327 | 402 | 391 | 399 | 383 | 383 | 364 | 377 | 348 |
| 1982 | 448 | 440 | 348 | 335 | 402 | 395 | 396 | 380 | 386 | 367 | 378 | 359 |
| 1983 | 448 | 439 | 346 | 335 | 396 | 394 | 397 | 381 | 385 | 367 | 379 | 355 |
| 1984 | 452 | 439 | 349 | 336 | 401 | 396 | 401 | 381 | 385 | 369 | 380 | 354 |
| 1985 | 454 | 444 | 354 | 341 | 406 | 401 | 401 | 384 | 393 | 373 | 385 | 363 |
| MATHEMATICS | | | | | | | | | | | | |
| 1981 | 508 | 459 | 381 | 350 | 538 | 487 | 449 | 402 | 439 | 392 | 428 | 371 |
| 1982 | 510 | 459 | 385 | 354 | 538 | 488 | 450 | 400 | 441 | 394 | 424 | 377 |
| 1983 | 510 | 460 | 388 | 356 | 537 | 490 | 451 | 402 | 443 | 393 | 427 | 374 |
| 1984 | 511 | 464 | 389 | 362 | 541 | 497 | 452 | 406 | 444 | 399 | 426 | 379 |
| 1985 | 515 | 468 | 394 | 364 | 540 | 496 | 454 | 406 | 452 | 402 | 435 | 381 |

NOTE: Scores range from 200 to 800.

## TABLE 1-10

SCORES OF COLLEGE-BOUND SENIORS ON ACHIEVEMENT TESTS IN MATH AND SCIENCE, BY SEX AND RACIAL/ETHNIC GROUP, 1984 AND 1985

| Achievement and SAT-M tests | Total 1984 | Total 1985 | Male 1984 | Male 1985 | Female 1984 | Female 1985 | White 1984 | White 1985 | Black 1984 | Black 1985 | Asian 1984 | Asian 1985 | Native Am. 1984 | Native Am. 1985 | Mexican Am. 1984 | Mexican Am. 1985 | Puerto Rican 1984 | Puerto Rican 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Math. Level I | 542 | 540 | 560 | 559 | 524 | 523 | 546 | 544 | 481 | 478 | 566 | 653 | 507 | 497 | 486 | 483 | 510 | 511 |
| SAT-M (1) | 560 | 563 | 583 | 587 | 539 | 540 | 567 | 569 | 482 | 484 | 578 | 574 | 522 | 518 | 494 | 490 | 522 | 528 |
| Math. Level II | 659 | 658 | 671 | 671 | 638 | 637 | 661 | 660 | 577 | 581 | 674 | 674 | 614 | 614 | 603 | 598 | 621 | 620 |
| SAT-M | 650 | 649 | 664 | 664 | 626 | 624 | 655 | 655 | 563 | 560 | 655 | 653 | 609 | 597 | 594 | 584 | 609 | 610 |
| Chemistry | 573 | 576 | 586 | 589 | 550 | 551 | 575 | 576 | 505 | 512 | 586 | 587 | 524 | 537 | 524 | 523 | 543 | 556 |
| SAT-M | 629 | 632 | 644 | 648 | 603 | 604 | 632 | 634 | 535 | 545 | 650 | 649 | 592 | 573 | 590 | 584 | 588 | 590 |
| Biology | 550 | 554 | 570 | 574 | 533 | 538 | 553 | 557 | 481 | 479 | 556 | 548 | 521 | 496 | 491 | 496 | 517 | 522 |
| SAT-M | 579 | 584 | 607 | 612 | 556 | 560 | 583 | 587 | 490 | 497 | 609 | 603 | 536 | 521 | 517 | 525 | 524 | 534 |
| Physics | 597 | 592 | 608 | 603 | 551 | 547 | 600 | 594 | 511 | 513 | 599 | 593 | 574 | 561 | 546 | 545 | 543 | 538 |
| SAT-M | 651 | 652 | 656 | 657 | 630 | 630 | 655 | 656 | 552 | 557 | 663 | 661 | 634 | 613 | 610 | 610 | 595 | 590 |

(1) Score on the mathematics portion of the aptitude test.

NOTE: Scores range from 200 to 800.

SOURCE: National College Bound Seniors, 1985 Admissions Testing Program of the College Board

## TABLE 1-11

## NUMBER OF YEARS OF STUDY BY STUDY BY COLLEGE BOUND SENIORS, BY SUBJECT AND SEX, 1985

| | English | | Mathematics | | For. Languages | | Bio. Sciences | | Phy. Sciences | | Soc. Studies | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| | % | % | % | % | % | % | % | % | % | % | % | % |
| No Courses | 0.2 | 0.1 | 0.2 | 0.2 | 13.9 | 8.8 | 4.7 | 3.3 | 4.8 | 8.1 | 0.6 | 0.5 |
| One Year | 0.9 | 0.7 | 0.9 | 1.3 | 13.3 | 11.6 | 62.1 | 60.0 | 24.1 | 34.4 | 1.8 | 1.8 |
| Two Years | 1.3 | 0.9 | 6.1 | 9.7 | 36.9 | 33.9 | 25.4 | 28.8 | 37.8 | 37.7 | 14.9 | 15.7 |
| Three Years | 4.4 | 3.8 | 19.8 | 27.9 | 20.6 | 23.2 | 5.2 | 5.5 | 26.1 | 16.5 | 40.5 | 43.0 |
| Four Years | 84.8 | 84.1 | 57.6 | 50.5 | 12.3 | 17.5 | 2.0 | 1.7 | 5.5 | 2.7 | 36.4 | 33.3 |
| Five or More Years | 8.4 | 10.5 | 15.4 | 10.4 | 3.0 | 4.9 | 0.7 | 0.6 | 1.7 | 0.8 | 5.8 | 5.7 |
| Number Responding | 428405 | 479261 | 427992 | 478767 | 425452 | 476929 | 426541 | 477578 | 425984 | 476205 | 425431 | 475987 |
| Mean Number Years | 3.98 | 4.02 | 3.80 | 3.58 | 2.13 | 2.44 | 1.40 | 1.44 | 2.08 | 1.74 | 3.28 | 3.24 |
| Mean Number (Total) | | 4.00 | | 3.68 | | 2.29 | | 1.42 | | 1.90 | | 3.26 |

## TABLE 1-12

## PERCENT OF COLLEGE BOUND SENIORS INTENDING TO STUDY VARIOUS FIELDS, BY SEX, 1985

| Number Responding | 415,731 Males | 467,319 Females | 883,050 Total | | |
|---|---|---|---|---|---|
| | Male % | Female % | Total % | SAT Verbal Mean | SAT Math Mean |
| Arts and Humanities | 8.7 | 11.7 | 10.3 | 445 | 462 |
| Architecture/Environmental Design | 2.7 | 0.8 | 1.7 | 420 | 490 |
| Art | 2.1 | 4.8 | 3.6 | 412 | 427 |
| English/Literature | 0.9 | 1.8 | 1.4 | 526 | 499 |
| Foreign Languages | 0.3 | 1.4 | 0.9 | 488 | 493 |
| Music | 1.5 | 1.3 | 1.4 | 443 | 463 |
| Philosophy and Religion | 0.5 | 0.2 | 0.3 | 477 | 493 |
| Theater Arts | 0.6 | 1.5 | 1.1 | 445 | 443 |
| Biological Sciences and Related Areas | 14.1 | 22.9 | 18.8 | 439 | 480 |
| Agriculture | 1.4 | 0.6 | 0.9 | 400 | 433 |
| Biological Sciences | 3.0 | 3.1 | 3.1 | 480 | 516 |
| Forestry/Conservation | 0.6 | 0.1 | 0.4 | 423 | 452 |
| Health and Medical | 9.1 | 19.0 | 14.4 | 433 | 476 |
| Business, Commerce, and Communications | 23.2 | 26.2 | 24.8 | 414 | 455 |
| Business and Commerce | 19.5 | 22.0 | 21.0 | 407 | 455 |
| Communications | 3.3 | 4.2 | 3.8 | 452 | 454 |
| Physical Sciences and Related Areas | 34.1 | 10.6 | 21.8 | 445 | 530 |
| Computer Science/Systems Analysis | 9.4 | 5.0 | 7.1 | 413 | 488 |
| Engineering | 21.1 | 3.4 | 11.7 | 453 | 545 |
| Mathematics | 1.2 | 1.1 | 1.1 | 459 | 578 |
| Physical Sciences | 2.5 | 1.0 | 1.7 | 506 | 569 |
| Social Sciences and Related Areas | 13.3 | 22.2 | 18.0 | 441 | 461 |
| Education | 2.1 | 7.0 | 4.7 | 404 | 432 |
| Ethnic Studies | 0.0 | 0.0 | 0.0 | 388 | 381 |
| Geography | 0.0 | 0.0 | 0.0 | 423 | 468 |
| History and Cultures | 0.7 | 0.4 | 0.5 | 497 | 484 |
| Home Economics | 0.1 | 0.7 | 0.4 | 385 | 408 |
| Library Science | 0.0 | 0.0 | 0.0 | 479 | 450 |
| Military Science | 1.3 | 0.1 | 0.7 | 437 | 475 |
| Psychology | 1.5 | 6.3 | 4.1 | 440 | 455 |
| Social Sciences | 7.5 | 7.6 | 7.5 | 465 | 482 |
| Miscellaneous | 6.6 | 6.4 | 6.5 | 429 | 469 |
| Other | 1.1 | 0.9 | 1.0 | 402 | 435 |
| Trade and Vocational | 0.8 | 0.7 | 0.8 | 350 | 387 |
| Undecided | 4.7 | 4.8 | 4.8 | 446 | 488 |

SOURCE: Admissions Testing Program of the College Board

TABLE 1-13

INTENDED COLLEGE MAJOR AND DEGREE LEVEL GOAL OF HIGH SCHOOL SENIORS RELATED TO S.A.T. SCORES, BY SEX, 1987

| | NUMBER OF SAT TAKERS | PERCENT | % MALE/FEMALE | SAT-V MEAN | SAT-M MEAN |
|---|---|---|---|---|---|
| INTENDED COLLEGE MAJOR | | | | | |
| Agriculture/Natural Resources | 13,160 | 1 | 58/42 | 416 | 446 |
| Architecture/Environ. Design | 27,182 | 3 | 63/37 | 417 | 481 |
| Arts:Visual & Performing | 57,497 | 6 | 38/62 | 435 | 448 |
| Biological Sciences | 33,859 | 3 | 46/54 | 476 | 517 |
| Business & Commerce | 227,299 | 23 | 47/53 | 408 | 459 |
| Communications | 45,727 | 5 | 35/65 | 452 | 459 |
| Computer/Information Sciences | 36,378 | 4 | 65/35 | 403 | 476 |
| Education | 59,544 | 6 | 21/79 | 408 | 437 |
| Engineering | 109,437 | 11 | 84/16 | 456 | 554 |
| Foreign/Classical Languages | 7,949 | 1 | 20/80 | 489 | 500 |
| General/Interdisciplinary | 5,858 | 1 | 40/60 | 504 | 520 |
| Health & Allied Services | 116,719 | 12 | 32/68 | 430 | 476 |
| Home Economics | 3,737 | 0 | 12/88 | 379 | 406 |
| Language & Literature | 11,473 | 1 | 34/66 | 537 | 518 |
| Library & Archival Sciences | 261 | 0 | 26/74 | 471 | 454 |
| Mathematics | 7,114 | 1 | 52/48 | 475 | 602 |
| Military Sciences | 8,519 | 1 | 86/14 | 428 | 474 |
| Philosophy/Religion/Theology | 2,746 | 0 | 60/40 | 483 | 505 |
| Physical Sciences | 13,763 | 1 | 70/30 | 507 | 576 |
| Public Affairs & Services | 20,511 | 2 | 46/54 | 390 | 414 |
| Social Sciences & History | 107,463 | 11 | 35/65 | 465 | 483 |
| Technical & Vocational | 17,982 | 2 | 56/44 | 363 | 401 |
| Undecided | 51,186 | 5 | 53/47 | 426 | 471 |
| DEGREE-LEVEL GOAL | | | | | |
| Certificate Program | 20,183 | 2 | 48/52 | 363 | 399 |
| Associate Degree | 24,077 | 2 | 35/65 | 356 | 379 |
| Bachelor's Degree | 297,888 | 30 | 49/51 | 408 | 451 |
| Master's Degree | 251,076 | 26 | 49/51 | 449 | 500 |
| Doctoral/Related Degree | 168,043 | 17 | 48/52 | 484 | 534 |
| Other | 8,779 | 1 | 45/55 | 357 | 398 |
| Undecided | 207,314 | 21 | 45/55 | 424 | 465 |

SOURCE: 1980 Census of Population, Supplementary Report May 1981, U.S. Department of Commerce and personal communication, U.S. Bureau of the Census: Asian Americans: Growth, Change and Diversity, Population Reference Bureau, 1985; Special Report on Hispanics, 1987, Bureau of the Census, personal communication.

## TABLE 1-14

U.S. POPULATION, 1980 AND 1986[1] AND COLLEGE ENROLLMENTS

| | 1980 U.S. Population | | Current (1) U.S. Population | | % of 20-24 Yr. Olds in Each Group in College in 1985 |
|---|---|---|---|---|---|
| | No. | % | No. | % | |
| Total U.S. | 226,610 | 100.0 | 241,752 | 100.0 | 24 |
| White (2) | 188,341 | 83.1 | 199,117 | 82.4 | 24 |
| Black | 26,488 | 11.7 | 28,930 | 12.0 | 20 |
| Hispanic | 14,604 | 6.4 | 18,790 | 7.8 | 16 |
| Mexican | 8,679 | 3.8 | 11,762 | 4.9 | |
| Puerto Rican | 2,005 | 0.9 | 2,284 | 0.9 | |
| Cuban | 806 | 0.4 | 1,017 | 0.4 | |
| Central or South Am. | | 0.0 | 2,139 | 0.9 | |
| Other | 3,114 | 1.4 | 1,588 | 0.7 | |
| Indian/Alaskan Native | 1,418 | 0.6 | 1,507 | 0.6 | |
| Asian/Pacific Islander | 3,606 | 1.6 | 5,148 | 2.1 | |
| Chinese | 812 | 0.4 | 1,079 | 0.4 | 60 |
| Filippino | 782 | 0.3 | 1,052 | 0.4 | 27 |
| Japanese | 716 | 0.3 | 766 | 0.3 | 48 |
| Vietnamese | 245 | 0.1 | 634 | 0.3 | 42 |
| Korean | 357 | 0.2 | 543 | 0.2 | 40 |
| Asian Indian | 387 | 0.2 | 526 | 0.2 | |
| Laotian | 48 | 0.0 | 218 | 0.1 | |
| Cambodian | 16 | 0.0 | 161 | 0.1 | |
| Hawaiian | 172 | 0.1 | | 0.0 | |
| Samoan | 40 | 0.0 | | 0.0 | |
| Guamanian | 31 | 0.0 | | 0.0 | |
| Other | | 0.0 | 169 | 0.1 | |
| Other Minority (3) | 6,757 | 3.0 | 7,050 | 2.9 | |

(1) Data estimates are for various years from 1984 through 1987.
(2) Non-Hispanic. (3) Includes Nonresident Aliens.

SOURCE: 1986-87 Fact Book on Higher Education, American Council on Education

## TABLE 1-15

## 18 YEAR OLDS BY SEX AND RACE, SELECTED YEARS, 1950-2050

| Year | Population, Age 18[a] (in thousands) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | All Races | | | Black & Other Races | | | Black | | |
| | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| 1950 | 2,164 | 1,090 | 1,074 | 271 | 133 | 138 | b | b | b |
| 1960 | 2,613 | 1,323 | 1,289 | 312 | 155 | 157 | 288 | 143 | 145 |
| 1970 | 3,781 | 1,914 | 1,868 | 512 | 254 | 259 | 463 | 229 | 234 |
| 1975 | 4,256 | 2,159 | 2,097 | 641 | 320 | 321 | 568 | 283 | 285 |
| 1976 | 4,266 | 2,164 | 2,101 | 646 | 323 | 323 | 570 | 284 | 286 |
| 1977 | 4,257 | 2,159 | 2,099 | 666 | 332 | 333 | 586 | 292 | 294 |
| 1978 | 4,247 | 2,157 | 2,090 | 670 | 335 | 335 | 588 | 292 | 295 |
| 1979 | 4,316 | 2,196 | 2,121 | 689 | 345 | 344 | 600 | 299 | 300 |
| 1980 | 4,256 | 2,165 | 2,090 | 697 | 350 | 347 | 601 | 300 | 300 |
| 1981 | 4,234 | 2,156 | 2,078 | 706 | 356 | 350 | 605 | 303 | 302 |
| 1982 | 4,188 | 2,140 | 2,049 | 712 | 361 | 351 | 606 | 306 | 301 |
| | Series II Projections[c] | | | | | | | | |
| 1983 | 4,015 | 2,046 | 1,969 | 701 | 353 | 348 | 595 | 299 | 296 |
| 1984 | 3,774 | 1,926 | 1,848 | 672 | 339 | 333 | 569 | 286 | 283 |
| 1985 | 3,658 | 1,863 | 1,795 | 643 | 324 | 319 | 540 | 270 | 269 |
| 1990 | 3,431 | 1,752 | 1,679 | 634 | 319 | 315 | 517 | 260 | 257 |
| 1995 | 3,332 | 1,702 | 1,603 | 620 | 313 | 307 | 496 | 250 | 246 |
| 2000 | 3,751 | 1,916 | 1,836 | 773 | 391 | 382 | 613 | 309 | 304 |
| 2025 | 3,675 | 1,878 | 1,797 | 855 | 432 | 422 | 667 | 334 | 328 |
| 2050 | 3,650 | 1,865 | 1,784 | 920 | 465 | 455 | 688 | 348 | 341 |

a Total population, including armed forces overseas as of July 1.

b Source does not estimate population for "Negro" or "black," only "nonwhite."

c Series II projections use a fertility assumption of 1.9 lifetime births per woman. Projections reflect the results of the 1980 Census.

**Sources:** U.S. Bureau of the Census, *Current Population Reports*, Series P-25 (Washington: GPO), No. 311, p. 22; No. 519, table 1; No. 704, table 8; No. 721, table 1; No. 800, table 1; No. 870, table 1; No. 917, table 1; No. 922, table 2; No. 952, tables 5 and 6.

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 1-16

## COLLEGE ENROLLMENT AND LABOR FORCE STATUS OF 1984 AND 1985 HIGH SCHOOL GRADUATES 16-24, BY SEX AND RACE/ETHNICITY

[Numbers in thousands]

| Item | Civilian noninstitutional population | | | Civilian labor force[1] | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Unemployed | |
| | Number | Percent | Percent of high school graduates | Number | Labor force participation rate | Employed | Number | Unemployment rate |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **1984 high school graduates[2] Total** | **3,012** | **100.0** | **100.0** | **1,839** | **61.1** | **1,480** | **359** | **19.5** |
| Men | 1,429 | 47.4 | 47.4 | 879 | 61.5 | 704 | 175 | 19.9 |
| Women | 1,583 | 52.6 | 52.6 | 960 | 60.6 | 776 | 184 | 19.2 |
| White[3] | 2,514 | 83.5 | 83.5 | 1,550 | 61.7 | 1,297 | 253 | 16.3 |
| Black[3] | 438 | 14.5 | 14.5 | 251 | 57.3 | 148 | 103 | 41.0 |
| Hispanic origin[4] | 185 | 6.1 | 6.1 | 114 | 61.6 | 81 | 33 | 28.9 |
| Enrolled in college, October 1984 | 1,662 | 100.0 | 55.2 | 719 | 43.3 | 616 | 103 | 14.3 |
| Men | 800 | 48.1 | 56.0 | 315 | 39.4 | 270 | 45 | 14.3 |
| Women | 862 | 51.9 | 54.5 | 404 | 46.9 | 246 | 58 | 14.4 |
| Full-time students | 1,531 | 92.1 | 50.8 | 615 | 40.2 | 521 | 94 | 15.3 |
| Part-time students | 131 | 7.9 | 4.3 | 104 | 79.4 | 95 | 9 | 8.7 |
| White[3] | 1,455 | 87.5 | 57.9 | 645 | 44.3 | 570 | 75 | 11.6 |
| Black[3] | 176 | 10.6 | 40.2 | 60 | 34.1 | 31 | 29 | (5) |
| Hispanic origin[4] | 82 | 4.9 | 44.3 | 32 | 39.0 | 30 | 2 | (5) |
| Not enrolled in college, October 1984 | 1,350 | 100.0 | 44.8 | 1,120 | 83.0 | 864 | 256 | 22.9 |
| Men | 629 | 46.6 | 44.0 | 564 | 89.7 | 434 | 130 | 23.0 |
| Women | 721 | 53.4 | 45.5 | 556 | 77.1 | 430 | 126 | 22.7 |
| White[3] | 1,059 | 78.4 | 42.1 | 905 | 85.5 | 727 | 178 | 19.7 |
| Black[3] | 262 | 19.4 | 59.8 | 191 | 72.9 | 117 | 74 | 38.7 |
| Hispanic origin[4] | 103 | 7.6 | 55.7 | 82 | 79.6 | 51 | 31 | 37.8 |
| **1985 high school graduates[6] Total** | **2,666** | **100.0** | **100.0** | **1,610** | **60.4** | **1,292** | **318** | **19.8** |
| Men | 1,286 | 48.2 | 48.2 | 785 | 61.0 | 626 | 159 | 20.3 |
| Women | 1,380 | 51.8 | 51.8 | 825 | 59.8 | 666 | 159 | 19.3 |
| White[3] | 2,241 | 84.1 | 84.1 | 1,383 | 61.7 | 1,177 | 206 | 14.9 |
| Black[3] | 333 | 12.5 | 12.5 | 191 | 57.4 | 95 | 96 | 50.3 |
| Hispanic origin[4] | 141 | 5.3 | 5.3 | 86 | 61.0 | 61 | 25 | 29.1 |
| Enrolled in college, October 1985 | 1,539 | 100.0 | 57.7 | 683 | 44.4 | 593 | 90 | 13.2 |
| Men | 754 | 49.0 | 58.6 | 327 | 43.4 | 280 | 47 | 14.4 |
| Women | 785 | 51.0 | 56.9 | 356 | 45.4 | 313 | 43 | 12.1 |
| Full-time students | 1,418 | 92.1 | 53.2 | 577 | 40.7 | 494 | 83 | 14.4 |
| Part-time students | 122 | 7.9 | 4.6 | 106 | 86.9 | 99 | 7 | 6.6 |
| White[3] | 1,332 | 86.5 | 59.4 | 620 | 46.5 | 552 | 68 | 11.0 |
| Black[3] | 141 | 9.2 | 42.3 | 44 | 31.2 | 29 | 15 | (5) |
| Hispanic origin[4] | 72 | 4.7 | 51.1 | 37 | (5) | 32 | 5 | (5) |
| Not enrolled in college, October 1985 | 1,127 | 100.0 | 42.3 | 927 | 82.3 | 699 | 228 | 24.6 |
| Men | 532 | 47.2 | 41.4 | 458 | 86.1 | 346 | 112 | 24.5 |
| Women | 595 | 52.8 | 43.1 | 469 | 78.8 | 353 | 116 | 24.7 |
| White[3] | 909 | 80.7 | 40.6 | 763 | 83.9 | 625 | 138 | 18.1 |
| Black[3] | 192 | 17.0 | 57.7 | 147 | 76.6 | 66 | 81 | 55.1 |
| Hispanic origin[4] | 69 | 6.1 | 48.9 | 49 | - (5) | 29 | 20 | (5) |

[1]The labor force includes all employed persons plus those seeking employment. The labor force participation rate is the percentage of persons either employed or seeking employment.

[2]Includes persons who graduated from high school between October 1983 and October 1984.

[3]Includes persons of Hispanic origin.

[4]Persons of Hispanic origin may be of any race.

[5]Data not shown where base is less than 75,000.

[6]Includes persons who graduated from high school between October 1984 and October 1985.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Employment of School-Age Youth: Graduates and Dropouts October 1984 and October 1985*. (This table was prepared October 1986.)

SOURCE: Elementary and Secondary Education Indicators in Brief, 1987, U. S. Department of Education

TABLE 1-17

EDUCATION STATUS OF 18-24 YEAR OLDS, BY RACE/ETHNICITY, 1978-85

| Race/ethnicity and year | Education status | | |
|---|---|---|---|
| | High school graduates | Enrolled in college | High school graduates enrolled in college |
| | Percent | | |
| White | | | |
| 1985 | 83.6 | 28.7 | 34.4 |
| 1984 | 83.0 | 28.0 | 33.7 |
| 1983 | 82.2 | 27.0 | 32.9 |
| 1982 | 82.4 | 27.2 | 33.1 |
| 1981 | 82.2 | 26.7 | 32.5 |
| 1980 | 82.6 | 26.2 | 31.8 |
| 1979 | 82.1 | 25.6 | 31.2 |
| 1978 | 82.6 | 25.7 | 31.1 |
| Black | | | |
| 1985 | 75.6 | 19.8 | 26.1 |
| 1984 | 74.7 | 20.4 | 27.2 |
| 1983 | 70.9 | 19.2 | 27.0 |
| 1982 | 70.9 | 19.8 | 28.0 |
| 1981 | 70.9 | 19.9 | 28.0 |
| 1980 | 69.7 | 19.2 | 27.6 |
| 1979 | 67.1 | 19.8 | 29.5 |
| 1978 | 67.8 | 20.1 | 29.7 |
| Hispanic* | | | |
| 1985 | 62.9 | 16.9 | 26.9 |
| 1984 | 60.1 | 17.9 | 29.9 |
| 1983 | 54.8 | 17.2 | 31.4 |
| 1982 | 57.6 | 16.8 | 29.2 |
| 1981 | 55.8 | 16.7 | 29.9 |
| 1980 | 54.1 | 16.1 | 29.8 |
| 1979 | 55.2 | 16.6 | 30.2 |
| 1978 | 55.9 | 15.2 | 27.2 |

*Hispanics may be of any race.

SOURCE: High School and Beyond Longitudinal Study Tabulations, National Center for Education Statistics, October 1985

TABLE 1-18

PERCENTAGES OF 1980 HIGH SCHOOL GRADUATES WHO HAD ENROLLED IN POST-SECONDARY EDUCATION BY FEBRUARY 1984 BY TYPE OF INSTITUTION, SEX AND RACE/ETHNICITY

| | ANY PSE | ANY VOC/ TECH | ANY 2YR COLLEGE | ANY 4YR COLLEGE |
|---|---|---|---|---|
| TOTAL | 65.75 | 7.64 | 27.89 | 45.15 |
| SEX | | | | |
| MALE | 62.78 | 5.87 | 27.37 | 44.00 |
| FEMALE | 68.59 | 9.34 | 28.38 | 46.25 |
| RACE/ETHNICITY | | | | |
| HISPANIC | 57.10 | 7.44 | 34.56 | 30.48 |
| -MEXICAN | 56.59 | 7.97 | 35.73 | 28.00 |
| -CUBAN | 83.09 | 8.32 | 52.12 | 47.70 |
| -PUERTO RICAN | 51.80 | 6.18 | 16.91 | 40.37 |
| -OTH HISP | 54.64 | 6.57 | 34.43 | 28.89 |
| AM INDIAN | 62.62 | 8.64 | 35.44 | 33.31 |
| ASIAN | 89.50 | 9.69 | 34.97 | 68.88 |
| BLACK | 61.73 | 9.06 | 23.21 | 42.66 |
| WHITE | 66.97 | 7.49 | 28.13 | 46.53 |

TABLE 1-19

PERCENTAGES OF 1980 HIGH SCHOOL GRADUATES WHO EARNED A CERTIFICATE, LICENSE OR DEGREE BY FEBRUARY 1984, BY TYPE OF AWARD, SEX AND RACE/ETHNICITY

| | CERTIFICATE | LICENSE | AA DEGREE | BA/BS DEGREE | ANY CERT/DEG |
|---|---|---|---|---|---|
| TOTAL | 31.82 | 13.12 | 17.19 | 25.86 | 42.29 |
| SEX | | | | | |
| MALE | 27.92 | 9.15 | 15.36 | 24.59 | 38.65 |
| FEMALE | 34.16 | 15.52 | 18.87 | 27.04 | 45.50 |
| RACE/ETHNICITY | | | | | |
| HISPANIC | 33.40 | 19.76 | 14.67 | 14.48 | 40.94 |
| -MEXICAN | 21.91 | 19.82 | 9.71 | 11.22 | 40.43 |
| -CUBAN | 26.81 | 1.47 | 24.46 | 28.62 | 44.21 |
| -PUERTO RICAN | 75.12 | 0.00 | 22.20 | 16.18 | 35.64 |
| -OTH HISP | 51.37 | 30.59 | 21.21 | 15.18 | 42.72 |
| AM INDIAN | 55.01 | 7.30 | 10.20 | 20.41 | 47.92 |
| ASIAN | 45.93 | 36.08 | 15.00 | 12.41 | 32.88 |
| BLACK | 29.24 | 6.82 | 8.93 | 13.38 | 34.63 |
| WHITE | 31.51 | 13.31 | 18.57 | 28.27 | 43.60 |

SOURCE: The American Freshman: National Norms for Fall 1973 through 1986, American Council on Education, Office of Research and Cooperative Institutional Research Program, American Council on Education, University of California at Los Angeles

## TABLE 1-20

PERCENTAGE DISTRIBUTION OF FRESHMEN BY PROBABLE MAJOR FIELD OF STUDY IN ALL INSTITUTIONS OF HIGHER EDUCATION, SELECTED YEARS, 1973-86

| Probable Major Field of Study | 1973 | | 1975 | | 1978 | | 1980 | | 1982 | | 1983 | | 1984 | | 1985 | | 1986 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| Agriculture/Forestry | 4.4 | 1.0 | 5.7 | 1.9 | 4.5 | 2.0 | 4.1 | 1.8 | 3.8 | 1.4 | 2.9 | 0.9 | 3.3 | 1.0 | 3.2 | 1.0 | 2.8 | 1.7 |
| Arts & Humanities | 10.1 | 15.0 | 12.7 | 12.8 | 7.4 | 10.6 | 6.4 | 10.1 | 6.8 | 9.7 | 6.8 | 9.0 | 6.6 | 8.8 | 7.1 | 9.8 | 7.4 | 10.0 |
| Biological Sciences , | 8.2 | 5.7 | 7.1 | 5.5 | 4.8 | 4.4 | 3.7 | 3.8 | 3.7 | 3.8 | 4.1 | 3.4 | 4.1 | 4.2 | 3.4 | 3.3 | 4.0 | 3.8 |
| Business | 21.1 | 14.0 | 20.0 | 17.5 | 25.0 | 23.1 | 22.9 | 24.5 | 22.3 | 25.7 | 22.7 | 26.0 | 25.1 | 27.5 | 25.7 | 27.5 | 26.6 | 27.0 |
| Education | 5.2 | 19.6 | 4.6 | 15.5 | 3.3 | 12.1 | 3.3 | 11.6 | 2.4 | 9.0 | 2.9 | 8.9 | 2.8 | 9.6 | 3.3 | 10.4 | 3.8 | 12.1 |
| Engineering | 12.1 | 0.7 | 14.0 | 1.3 | 18.8 | 2.3 | 21.0 | 3.2 | 22.3 | 3.6 | 20.6 | 3.5 | 20.1 | 3.0 | 19.3 | 3.0 | 19.7 | 2.9 |
| Health Professions (non-M.D.) | 4.6 | 16.5 | 1.8 | 13.2 | 2.0 | 14.6 | 1.9 | 13.3 | 1.6 | 17.8 | 2.1 | 14.9 | 2.3 | 13.8 | 2.0 | 8.9 | 2.0 | 9.9 |
| Mathematics/Statistics | 1.8 | 1.6 | 1.1 | 1.1 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 | 0.9 | 0.7 |
| Computer Science | | | | | 1.6 | 1.2 | 2.7 | 2.4 | 4.9 | 4.0 | 5.4 | 3.7 | 4.3 | 2.7 | 3.1 | 1.6 | 2.6 | 1.3 |
| Physical Sciences | 4.2 | 1.1 | 4.0 | 1.3 | 3.5 | 1.3 | 3.6 | 1.6 | 2.6 | 1.0 | 2.5 | 1.0 | 2.5 | 1.1 | 2.3 | 0.9 | 2.2 | 1.0 |
| Premed, Predent, Prevet. | | | | | 4.0 | 2.9 | 3.6 | 3.2 | 3.2 | 3.0 | 3.3 | 3.2 | 3.2 | 3.1 | 3.1 | 3.2 | 2.9 | 2.9 |
| Social Sciences* | 5.5 | 11.7 | 3.7 | 8.9 | 5.0 | 9.5 | 4.5 | 8.6 | 4.2 | 7.2 | 4.2 | 7.6 | 5.1 | 8.4 | 5.2 | 9.6 | 5.3 | 10.2 |
| Other Fields (Technical) | 8.4 | 2.0 | 10.3 | 6.7 | 7.0 | 2.0 | 8.5 | 2.9 | 9.7 | 4.3 | 9.9 | 3.8 | 7.7 | 2.4 | 7.5 | 2.4 | 6.4 | 1.9 |
| Other Fields (Non-Technical) | 7.1 | 3.5 | 10.2 | 8.8 | 8.1 | 7.9 | 9.3 | 6.9 | 8.2 | 3.3 | 8.1 | 7.1 | 8.0 | 7.6 | 9.0 | 8.1 | 10.0 | 7.9 |
| Undecided | 4.5 | 4.9 | 4.6 | 5.5 | 3.9 | 5.3 | 3.8 | 5.5 | 3.7 | 5.5 | 4.0 | 5.7 | 4.1 | 6.2 | 4.7 | 6.9 | 5.4 | 7.5 |

* Political Science is included in Arts and Humanities through 1975 and then in Social Sciences.

SOURCE: The American Freshman: National Norms for Fall 1978 through 1986, Cooperative Institutional Research Program, University of California at Los Angeles and American Council on Education

## TABLE 1-21

PROBABLE CAREER CHOICES OF COLLEGE FRESHMEN, BY SEX (WEIGHTED NATIONAL NORMS), SELECTED YEARS, 1978-1986

| | 1978 | | 1980 | | 1982 | | 1983 | | 1984 | | 1985 | | 1986 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIELD | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| Accountant/Actuary | 6.4 | 6.2 | 5.4 | 6.2 | 5.1 | 6.5 | 5.0 | 6.7 | 5.2 | 6.8 | 5.5 | 7.1 | 5.1 | 6.5 |
| Actor/Entertainer | 0.8 | 1.0 | 0.9 | 1.0 | 0.7 | 1.0 | 0.8 | 0.9 | 0.7 | 0.9 | 0.9 | 1.0 | 0.9 | 1.0 |
| Architect/Urban Plan. | 2.5 | 0.5 | 2.8 | 0.8 | 2.2 | 0.6 | 1.9 | 0.5 | 2.2 | 0.5 | 2.3 | 0.5 | 2.1 | 0.7 |
| Artist | 1.0 | 2.1 | 1.4 | 2.4 | 1.3 | 2.1 | 1.5 | 1.9 | 1.3 | 1.6 | 1.4 | 1.6 | 1.4 | 1.9 |
| Business | | | | | | | | | | | | | | |
| Clerical | 0.3 | 4.6 | 0.3 | 3.9 | 0.3 | 3.5 | 0.3 | 3.6 | 0.4 | 3.5 | 0.4 | 3.1 | 0.3 | 2.4 |
| Executive | 11.3 | 7.3 | 11.1 | 9.2 | 10.8 | 10.1 | 11.3 | 10.0 | 12.5 | 11.4 | 13.6 | 11.6 | 13.9 | 12.1 |
| Owner/Proprietor | 4.1 | 1.0 | 4.1 | 1.3 | 3.9 | 1.5 | 4.0 | 1.5 | 4.5 | 1.7 | 4.7 | 2.0 | 5.3 | 2.3 |
| Salesperson/Buyer | 1.2 | 1.3 | 1.1 | 1.2 | 1.1 | 1.2 | 1.1 | 1.3 | 1.3 | 1.3 | 1.4 | 1.8 | 1.5 | 1.7 |
| Clergy | 0.8 | 0.2 | 0.7 | 0.1 | 0.5 | 0.1 | 0.5 | 0.1 | 0.4 | 0.1 | 0.5 | 0.1 | 0.4 | 0.1 |
| Clinical Psychologist | 0.5 | 1.4 | 0.4 | 1.4 | 0.3 | 1.4 | 0.5 | 1.4 | 0.5 | 1.7 | 0.5 | 2.0 | 0.6 | 2.1 |
| College Teacher | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 | 0.3 |
| Comp. Progr/Analyst | 4.0 | 3.0 | 5.6 | 4.9 | 9.7 | 8.0 | 10.2 | 7.0 | 7.7 | 4.6 | 5.7 | 3.2 | 4.6 | 2.5 |
| Conserv/Forester | 1.9 | 0.8 | 1.4 | 0.7 | 1.3 | 0.5 | 1.1 | 0.3 | 1.1 | 0.2 | 1.3 | 0.4 | 1.4 | 0.3 |
| Dentist | 1.4 | 0.6 | 1.2 | 0.7 | 0.9 | 0.5 | 0.9 | 0.6 | 0.7 | 0.5 | 0.7 | 0.4 | 0.7 | 0.4 |
| Dietician | 0.1 | 1.0 | 0.1 | 0.7 | 0.1 | 0.6 | 0.1 | 0.5 | 0.1 | 0.5 | 0.1 | 0.4 | 0.0 | 0.4 |
| Engineer | 16.5 | 2.2 | 19.1 | 2.9 | 20.6 | 3.6 | 18.8 | 3.3 | 18.5 | 2.9 | 17.7 | 2.9 | 17.4 | 2.8 |
| Farmer/Rancher | 1.8 | 0.5 | 2.0 | 0.4 | 2.0 | 0.4 | 1.4 | 0.2 | 1.6 | 0.3 | 1.2 | 0.3 | 1.0 | 0.1 |
| Foreign Serv. Worker | 0.3 | 0.7 | 0.4 | 0.6 | 0.4 | 0.7 | 0.4 | 0.7 | 0.5 | 0.8 | 0.6 | 1.1 | 0.6 | 1.2 |
| Homemaker(full-time) | 0.0 | 0.3 | 0.1 | 0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.2 |
| Interior Decorator | 0.1 | 1.0 | 0.1 | 1.0 | 0.1 | 1.0 | 0.1 | 0.8 | 0.1 | 0.8 | 0.1 | 1.1 | 0.1 | 1.0 |
| Interpreter | 0.1 | 0.3 | 0.0 | 0.3 | 0.1 | 0.3 | 0.0 | 0.3 | 0.0 | 0.4 | 0.1 | 0.3 | 0.1 | 0.3 |
| Lab. Tech/Hygienist | 0.7 | 3.0 | 0.6 | 2.3 | 0.5 | 2.0 | 0.7 | 1.9 | 0.4 | 1.5 | 0.4 | 1.1 | 0.3 | 1.1 |
| Law Enforce. Officer | 2.2 | 0.9 | 1.8 | 0.6 | 1.9 | 0.5 | 1.8 | 0.6 | 1.8 | 0.5 | 2.0 | 0.6 | 1.7 | 0.6 |
| Lawyer/Judge | 5.3 | 3.4 | 4.8 | 3.5 | 4.7 | 3.9 | 4.2 | 3.6 | 4.4 | 3.7 | 4.1 | 3.7 | 4.1 | 4.0 |
| Military Career | 1.8 | 0.4 | 1.7 | 0.2 | 1.6 | 0.2 | 2.0 | 0.3 | 2.1 | 0.3 | 2.0 | 0.3 | 2.3 | 0.3 |
| Musician | 1.6 | 1.2 | 1.5 | 0.9 | 1.4 | 0.9 | 1.2 | 0.9 | 1.2 | 0.7 | 1.5 | 0.8 | 1.5 | 0.8 |
| Nurse | 0.2 | 7.7 | 0.2 | 7.2 | 0.2 | 7.7 | 0.3 | 8.4 | 0.2 | 7.5 | 0.1 | 6.2 | 0.2 | 5.1 |
| Optometrist | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| Pharmacist | 0.7 | 0.6 | 0.5 | 0.5 | 0.3 | 0.5 | 0.5 | 0.7 | 0.5 | 0.8 | 0.5 | 0.8 | 0.6 | 0.8 |
| Physician | 4.3 | 2.8 | 4.1 | 2.9 | 4.1 | 3.1 | 4.5 | 3.4 | 4.5 | 3.5 | 4.1 | 3.4 | 3.9 | 3.4 |
| School Counselor | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 | 0.2 | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 | 0.4 |
| School Princ/Supt. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scientific Researcher | 2.7 | 1.7 | 2.2 | 1.5 | 1.8 | 1.2 | 1.8 | 1.2 | 1.9 | 1.2 | 1.7 | 1.2 | 1.8 | 1.1 |
| Social/Rec. Worker | 0.6 | 3.9 | 0.6 | 3.2 | 0.3 | 2.0 | 0.4 | 2.1 | 0.4 | 2.1 | 0.3 | 2.3 | 0.4 | 2.3 |
| Statistician | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Therapist | 0.5 | 3.4 | 0.6 | 3.4 | 0.5 | 3.3 | 0.7 | 3.8 | 0.9 | 3.8 | 0.8 | 3.5 | 0.9 | 3.2 |
| Teacher (Elementary) | 0.4 | 6.8 | 0.5 | 6.9 | 0.4 | 5.5 | 0.3 | 5.7 | 0.4 | 6.1 | 0.5 | 6.7 | 0.6 | 7.9 |
| Teacher (Secondary) | 2.0 | 3.0 | 1.9 | 2.4 | 1.4 | 1.9 | 1.8 | 2.1 | 1.8 | 2.5 | 2.1 | 2.8 | 2.6 | 3.1 |
| Veterinarian | 1.1 | 1.6 | 0.9 | 1.5 | 0.8 | 1.5 | 0.7 | 1.3 | 0.7 | 1.5 | 0.7 | 1.4 | 0.7 | 1.1 |
| Writer/Journalist | 1.4 | 2.4 | 1.6 | 2.5 | 1.6 | 2.6 | 1.5 | 2.5 | 1.6 | 2.4 | 1.6 | 2.8 | 1.6 | 2.9 |
| Skilled Trades | 3.1 | 0.4 | 3.2 | 0.5 | 2.9 | 0.3 | 2.7 | 0.4 | 2.4 | 0.2 | 2.9 | 0.3 | 2.6 | 0.3 |
| Other | 5.7 | 8.3 | 5.8 | 8.1 | 5.6 | 7.5 | 5.5 | 7.4 | 5.3 | 7.7 | 5.8 | 7.9 | 5.8 | 7.7 |
| Undecided | 9.6 | 11.6 | 8.9 | 11.3 | 8.1 | 10.8 | 8.8 | 11.5 | 9.2 | 12.5 | 9.2 | 12.1 | 9.9 | 13.2 |

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 1-22

## TOTAL ENROLLMENT IN HIGHER EDUCATION, BY TYPE OF INSTITUTION AND RACE, FALL 1976, 1980, 1982 AND 1984

| Type of institution and race/ethnicity of student | Number, in thousands | | | | Percentage distribution | | | |
|---|---|---|---|---|---|---|---|---|
| | 1976 | 1980 | 1982 | 1984 | 1976 | 1980 | 1982 | 1984 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **All institutions** | **10,986** | **12,087** | **12,388** | **12,162** | **100.0** | **100.0** | **100.0** | **100.0** |
| White, non-Hispanic | 9,076 | 9,833 | 9,997 | 9,767 | 82.6 | 81.4 | 80.7 | 80.3 |
| Total minority | 1,691 | 1,949 | 2,059 | 2,063 | 15.4 | 16.1 | 16.6 | 17.0 |
| Black, non-Hispanic | 1,033 | 1,107 | 1,101 | 1,070 | 9.4 | 9.2 | 8.9 | 8.8 |
| Hispanic | 384 | 472 | 519 | 529 | 3.5 | 3.9 | 4.2 | 4.3 |
| Asian or Pacific Islander | 198 | 286 | 351 | 382 | 1.8 | 2.4 | 2.8 | 3.1 |
| American Indian/Alaskan Native | 76 | 84 | 88 | 83 | 0.7 | 0.7 | 0.7 | 0.7 |
| Nonresident alien | 219 | 305 | 331 | 332 | 2.0 | 2.5 | 2.7 | 2.7 |
| **4-year institutions** | **7,107** | **7,565** | **7,648** | **7,651** | **64.7** | **62.6** | **61.7** | **62.9** |
| White, non-Hispanic | 5,999 | 6,275 | 6,306 | 6,263 | 54.6 | 51.9 | 50.9 | 51.5 |
| Total minority | 931 | 1,050 | 1,073 | 1,108 | 8.5 | 8.7 | 8.7 | 9.1 |
| Black, non-Hispanic | 604 | 634 | 612 | 613 | 5.5 | 5.2 | 4.9 | 5.0 |
| Hispanic | 174 | 217 | 229 | 241 | 1.6 | 1.8 | 1.8 | 2.0 |
| Asian or Pacific Islander | 119 | 162 | 193 | 217 | 1.1 | 1.3 | 1.6 | 1.8 |
| American Indian/Alaskan Native | 35 | 37 | 39 | 37 | 0.3 | 0.3 | 0.3 | 0.3 |
| Nonresident alien | 177 | 241 | 270 | 280 | 1.6 | 2.0 | 2.2 | 2.3 |
| **2-year institutions** | **3,879** | **4,521** | **4,740** | **4,511** | **35.3** | **37.4** | **38.3** | **37.1** |
| White, non-Hispanic | 3,077 | 3,558 | 3,692 | 3,504 | 28.0 | 29.4 | 29.8 | 28.8 |
| Total minority | 760 | 899 | 987 | 955 | 6.9 | 7.4 | 8.0 | 7.8 |
| Black, non-Hispanic | 429 | 472 | 489 | 457 | 3.9 | 3.9 | 3.9 | 3.8 |
| Hispanic | 210 | 255 | 291 | 288 | 1.9 | 2.1 | 2.3 | 2.4 |
| Asian or Pacific Islander | 79 | 124 | 158 | 165 | 0.7 | 1.0 | 1.3 | 1.4 |
| American Indian/Alaskan Native | 41 | 47 | 49 | 45 | 0.4 | 0.4 | 0.4 | 0.4 |
| Nonresident alien | 42 | 64 | 61 | 52 | 0.4 | 0.5 | 0.5 | 0.4 |

SOURCE: The American Freshman: National Norms for Fall 1971 through 1986, American Council on Education, Office of Research and Cooperative Institutional Research Program, American Council on Education, University of California at Los Angeles

## TABLE 1-23

### RACIAL BACKGROUND OF FRESHMEN IN ALL INSTITUTIONS OF HIGHER EDUCATION, SELECTED YEARS, 1971-86

| YEAR | WHITE | | BLACK | | INDIAN | | ASIAN | | HISPANIC | | PUERTO RICAN | | OTHER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| 1971 | 92.1 | 90.6 | 5.5 | 7.2 | 1.0 | 0.9 | 0.5 | 0.4 | 1.1 | 1.1 | 0.2 | 0.2 | 1.2 | 1.1 |
| 1973 | 89.1 | 87.9 | 7.0 | 8.6 | 0.8 | 1.0 | 1.2 | 1.0 | 1.3 | 1.2 | 0.5 | 0.4 | 1.5 | 1.5 |
| 1975 | 87.2 | 85.6 | 8.0 | 10.1 | 0.9 | 0.8 | 1.6 | 1.3 | 1.8 | 1.6 | 0.7 | 0.6 | 2.1 | 1.7 |
| 1977 | 87.9 | 86.0 | 7.8 | 9.8 | 0.8 | 0.7 | 1.2 | 1.0 | 1.4 | 1.4 | 0.9 | 1.0 | 1.9 | 1.6 |
| 1979 | 87.2 | 85.4 | 8.2 | 10.1 | 1.0 | 1.0 | 1.6 | 1.2 | 1.1 | 1.2 | 1.1 | 1.0 | 2.2 | 1.8 |
| 1981 | 89.5 | 87.6 | 7.5 | 9.6 | 1.1 | 1.0 | 1.2 | 1.0 | 0.9 | 0.9 | 0.6 | 0.6 | 1.8 | 1.2 |
| 1983 | 88.0 | 85.9 | 7.8 | 10.1 | 1.0 | 1.1 | 1.7 | 1.4 | 0.9 | 0.9 | 0.7 | 0.7 | 1.8 | 1.5 |
| 1984 | 86.9 | 84.6 | 8.6 | 10.9 | 1.0 | 0.9 | 1.8 | 1.5 | 0.9 | 1.1 | 0.8 | 0.8 | 1.7 | 1.7 |
| 1985 | 87.3 | 87.3 | 8.1 | 10.0 | 1.0 | 1.1 | 2.1 | 1.8 | 1.0 | 1.4 | 0.6 | 0.7 | 1.5 | 1.5 |
| 1986 | 86.9 | 86.9 | 7.3 | 9.6 | 0.9 | 0.8 | 2.8 | 2.3 | 1.2 | 1.3 | 0.8 | 0.9 | 1.9 | 2.0 |

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 1-24

## TOTAL ENROLLMENT IN HIGHER EDUCATION, BY ATTENDANCE STATUS, SEX AND AGE, FALL 1970, 1975, 1980 AND 1985

| Characteristic | 1970 | | | 1975 | | | 1980 | | | 1985 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Full-time | Part-time | Total | Full-time | Part-time | Total | Full-time | Part-time | Total | Full-time | Part-time |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| **Men and women, total** | **8,581** | **5,815** | **2,766** | **11,185** | **6,841** | **4,344** | **12,097** | **7,098** | **4,999** | **12,247** | **7,075** | **5,172** |
| 14 to 17 years old | 259 | 242 | 17 | 278 | 242 | 36 | 247 | 216 | 31 | 235 | 203 | 32 |
| 18 and 19 years old | 2,600 | 2,406 | 194 | 2,786 | 2,510 | 276 | 2,901 | 2,580 | 320 | 2,600 | 2,322 | 278 |
| 20 and 21 years old | 1,880 | 1,647 | 233 | 2,243 | 1,854 | 390 | 2,423 | 2,060 | 364 | 2,383 | 1,975 | 408 |
| 22 to 24 years old | 1,457 | 881 | 576 | 1,754 | 1,008 | 746 | 1,989 | 1,174 | 815 | 1,933 | 1,227 | 705 |
| 25 to 29 years old | 1,074 | 407 | 668 | 1,774 | 692 | 1,082 | 1,871 | 610 | 1,261 | 1,953 | 695 | 1,258 |
| 30 to 34 years old | 487 | 100 | 388 | 967 | 279 | 687 | 1,243 | 264 | 979 | 1,261 | 310 | 951 |
| 35 years old and over | 823 | 134 | 689 | 1,383 | 256 | 1,127 | 1,422 | 193 | 1,229 | 1,885 | 345 | 1,540 |
| Men, total | 5,044 | 3,505 | 1,540 | 6,149 | 3,926 | 2,222 | 5,874 | 3,689 | 2,185 | 5,818 | 3,608 | 2,211 |
| 14 to 17 years old | 130 | 124 | 5 | 126 | 109 | 17 | 99 | 84 | 15 | 121 | 102 | 19 |
| 18 and 19 years old | 1,349 | 1,265 | 84 | 1,397 | 1,269 | 128 | 1,375 | 1,229 | 146 | 1,230 | 1,108 | 122 |
| 20 and 21 years old | 1,095 | 990 | 105 | 1,245 | 1,053 | 192 | 1,259 | 1,104 | 154 | 1,216 | 1,027 | 189 |
| 22 to 24 years old | 964 | 650 | 314 | 1,047 | 686 | 362 | 1,064 | 687 | 377 | 1,048 | 730 | 318 |
| 25 to 29 years old | 783 | 327 | 456 | 1,122 | 474 | 649 | 993 | 379 | 615 | 991 | 395 | 596 |
| 30 to 34 years old | 308 | 72 | 236 | 557 | 184 | 373 | 576 | 129 | 447 | 574 | 149 | 424 |
| 35 years old and over | 415 | 75 | 340 | 654 | 152 | 502 | 507 | 77 | 430 | 639 | 97 | 542 |
| Women, total | 3,537 | 2,311 | 1,225 | 5,036 | 2,915 | 2,120 | 6,223 | 3,409 | 2,814 | 6,429 | 3,468 | 2,961 |
| 14 to 17 years old | 129 | 117 | 12 | 152 | 133 | 19 | 148 | 132 | 17 | 113 | 101 | 12 |
| 18 and 19 years old | 1,250 | 1,140 | 110 | 1,389 | 1,241 | 147 | 1,526 | 1,352 | 174 | 1,370 | 1,214 | 156 |
| 20 and 21 years old | 786 | 657 | 128 | 998 | 800 | 198 | 1,165 | 955 | 209 | 1,166 | 948 | 218 |
| 22 to 24 years old | 493 | 231 | 262 | 706 | 322 | 384 | 925 | 487 | 438 | 885 | 497 | 388 |
| 25 to 29 years old | 291 | 80 | 212 | 652 | 218 | 433 | 878 | 232 | 646 | 962 | 299 | 662 |
| 30 to 34 years old | 179 | 28 | 151 | 410 | 95 | 315 | 667 | 135 | 531 | 687 | 161 | 527 |
| 35 years old and over | 409 | 59 | 349 | 729 | 105 | 625 | 914 | 115 | 799 | 1,246 | 248 | 998 |

SOURCES: U.S. Bureau of the Census, National Center for Education Statistics, National Science Foundation, National Research Council, Commission on Professionals in Science & Engineering

## TABLE 1-25

PERCENTAGE OF U.S. MINORITIES IN VARIOUS POPULATION GROUPS
(Data are for 1984-85)

| | White* | Black | Hispanic | Asian | Indian | Foreign |
|---|---|---|---|---|---|---|
| U.S. Population | 74.6 | 12.0 | 7.8 | 2.1 | 0.6 | 2.9 |
| Elem/Secondary Enrollment | 71.2 | 16.2 | 9.1 | 2.5 | 0.9 | |
| High School Graduates | 75.3 | 15.8 | 5.1 | 3.1 | 0.7 | |
| Undergraduate Enrollment | 79.2 | 9.1 | 5.8 | 3.1 | 0.7 | 2.1 |
| Graduate Enrollment | 79.6 | 4.7 | 2.8 | 2.6 | 0.3 | 9.9 |
| Total Enrollment | 80.3 | 8.8 | 4.3 | 3.1 | 0.7 | 2.7 |
| Bachelor's Degrees | 83.9 | 6.5 | 3.1 | 2.8 | 0.5 | 3.2 |
| S/E Bachelor's Degrees | 84.4 | 4.9 | 2.6 | 3.7 | 0.4 | 4.0 |
| Master's Degrees | 81.4 | 4.6 | 2.2 | 2.5 | 0.4 | 8.9 |
| S/E Master's Degrees | 72.1 | 2.5 | 1.8 | 4.8 | 0.3 | 18.5 |
| Ph.D. Degrees | 66.1 | 2.9 | 1.8 | 1.7 | 0.3 | 27.2 |
| Scl/Eng Ph.D.s | 62.5 | 1.5 | 1.3 | 2.0 | 0.2 | 32.5 |

*Non-Hispanic

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 1-26

## TOTAL ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY CONTROL, LEVEL, RACE/ETHNICITY, AND SEX, 1976, 1980, AND 1984

| Year and race/ethnicity and sex of student | Enrollment, by control of institution | | | Enrollment, by level | | | |
|---|---|---|---|---|---|---|---|
| | Total | Public | Private | Undergraduate | Graduate | First-professional | Unclassified |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **1976 total** | **10,985,614** | **8,641,037** | **2,344,577** | **8,432,240** | **1,081,858** | **244,121** | **1,227,395** |
| Men | 5,794,390 | 4,499,541 | 1,294,849 | 4,420,228 | 599,778 | 189,642 | 584,742 |
| Women | 5,191,224 | 4,141,496 | 1,049,728 | 4,012,012 | 482,080 | 54,479 | 642,653 |
| White, non-Hispanic | 9,076,131 | 7,094,521 | 1,981,610 | 6,899,743 | 907,583 | 220,003 | 1,048,802 |
| Men | 4,813,717 | 3,714,567 | 1,099,150 | 3,645,423 | 496,260 | 172,422 | 499,612 |
| Women | 4,262,414 | 3,379,954 | 882,460 | 3,254,320 | 411,323 | 47,581 | 549,190 |
| Black, non-Hispanic | 1,033,025 | 831,212 | 201,813 | 866,147 | 65,352 | 11,181 | 90,345 |
| Men | 469,881 | 375,389 | 94,492 | 397,084 | 27,016 | 7,234 | 38,547 |
| Women | 563,144 | 455,823 | 107,321 | 469,063 | 38,336 | 3,947 | 51,798 |
| Hispanic | 383,790 | 336,818 | 46,972 | 323,540 | 20,274 | 4,547 | 35,429 |
| Men | 209,714 | 183,881 | 25,833 | 175,940 | 11,359 | 3,498 | 18,917 |
| Women | 174,076 | 152,937 | 21,139 | 147,600 | 8,915 | 1,049 | 16,512 |
| Asian or Pacific Islander | 197,878 | 165,716 | 32,162 | 152,533 | 18,487 | 4,075 | 22,783 |
| Men | 108,434 | 89,423 | 19,011 | 82,558 | 11,600 | 2,933 | 11,343 |
| Women | 89,444 | 76,293 | 13,151 | 69,975 | 6,887 | 1,142 | 11,440 |
| American Indian/Alaskan Native | 76,110 | 67,500 | 8,610 | 61,267 | 3,887 | 1,253 | 9,703 |
| Men | 38,543 | 34,236 | 4,307 | 30,809 | 2,193 | 1,032 | 4,509 |
| Women | 37,567 | 33,264 | 4,303 | 30,458 | 1,694 | 221 | 5,194 |
| Nonresident alien | 218,680 | 145,270 | 73,410 | 129,010 | 66,275 | 3,062 | 20,333 |
| Men | 154,101 | 102,045 | 52,056 | 88,414 | 51,350 | 2,523 | 11,814 |
| Women | 64,579 | 43,225 | 21,354 | 40,596 | 14,925 | 539 | 8,519 |
| **1980 total** | **12,086,808** | **9,456,423** | **2,630,385** | **9,262,003** | **1,096,455** | **276,844** | **1,451,506** |
| Men | 5,868,095 | 4,521,632 | 1,346,463 | 4,488,357 | 568,969 | 198,483 | 612,286 |
| Women | 6,218,713 | 4,934,791 | 1,283,922 | 4,773,646 | 527,486 | 78,361 | 839,220 |
| White, non-Hispanic | 9,833,012 | 7,656,094 | 2,176,918 | 7,466,276 | 898,698 | 247,655 | 1,220,381 |
| Men | 4,772,918 | 3,658,136 | 1,114,782 | 3,632,900 | 452,886 | 179,538 | 507,594 |
| Women | 5,060,094 | 3,997,958 | 1,062,136 | 3,833,378 | 445,812 | 68,117 | 712,787 |
| Black, non-Hispanic | 1,106,750 | 876,070 | 230,680 | 932,254 | 59,993 | 12,824 | 101,679 |
| Men | 463,739 | 365,296 | 98,443 | 393,397 | 22,795 | 7,365 | 40,182 |
| Women | 643,011 | 510,774 | 132,237 | 538,857 | 37,198 | 5,459 | 61,497 |
| Hispanic | 471,717 | 406,150 | 65,567 | 390,463 | 24,263 | 6,534 | 50,457 |
| Men | 231,609 | 198,652 | 32,957 | 190,224 | 12,173 | 4,633 | 24,579 |
| Women | 240,108 | 207,498 | 32,610 | 200,239 | 12,090 | 1,901 | 25,878 |
| Asian or Pacific Islander | 286,446 | 239,710 | 46,736 | 215,002 | 23,494 | 6,124 | 41,826 |
| Men | 151,287 | 124,771 | 26,516 | 112,522 | 14,473 | 4,123 | 20,169 |
| Women | 135,159 | 114,939 | 20,220 | 102,480 | 9,021 | 2,001 | 21,657 |
| American Indian/Alaskan Native | 83,903 | 74,224 | 9,679 | 67,917 | 3,882 | 805 | 11,299 |
| Men | 37,776 | 33,417 | 4,359 | 30,542 | 1,909 | 545 | 4,780 |
| Women | 46,127 | 40,807 | 5,320 | 37,375 | 1,973 | 260 | 6,519 |
| Nonresident alien | 304,980 | 204,175 | 100,805 | 190,089 | 86,125 | 2,902 | 25,864 |
| Men | 210,766 | 141,360 | 69,406 | 128,772 | 64,733 | 2,279 | 14,982 |
| Women | 94,214 | 62,815 | 31,399 | 61,317 | 21,392 | 623 | 10,882 |
| **1984[1] total** | **12,161,778** | **9,424,911** | **2,736,867** | **9,451,086** | **1,100,353** | **276,364** | **1,333,995** |
| Men | 5,824,388 | 4,448,502 | 1,375,886 | 4,518,645 | 569,469 | 183,626 | 552,648 |
| Women | 6,337,390 | 4,976,409 | 1,360,981 | 4,932,421 | 530,884 | 92,738 | 781,347 |
| White, non-Hispanic | 9,766,845 | 7,524,802 | 2,242,043 | 7,549,607 | 882,253 | 241,597 | 1,093,388 |
| Men | 4,667,606 | 3,542,374 | 1,125,232 | 3,620,973 | 436,893 | 162,537 | 447,203 |
| Women | 5,099,239 | 3,982,428 | 1,116,811 | 3,928,634 | 445,360 | 79,060 | 646,185 |
| Black, non-Hispanic | 1,069,885 | 841,336 | 228,549 | 897,185 | 52,834 | 13,243 | 106,623 |
| Men | 434,515 | 340,030 | 94,485 | 368,089 | 19,961 | 7,017 | 39,448 |
| Women | 635,370 | 501,306 | 134,064 | 529,096 | 32,873 | 6,226 | 67,175 |
| Hispanic | 528,786 | 452,514 | 76,272 | 436,614 | 24,402 | 7,913 | 59,857 |
| Men | 251,030 | 213,705 | 37,325 | 206,337 | 11,676 | 5,152 | 27,865 |
| Women | 277,756 | 238,809 | 38,947 | 230,277 | 12,726 | 2,761 | 31,992 |
| Asian or Pacific Islander | 381,746 | 317,454 | 64,292 | 301,167 | 28,543 | 9,240 | 42,796 |
| Men | 205,542 | 169,568 | 35,974 | 160,564 | 17,865 | 5,786 | 21,327 |
| Women | 176,204 | 147,886 | 28,318 | 140,603 | 10,678 | 3,454 | 21,469 |
| American Indian/Alaskan Native | 82,672 | 71,642 | 11,030 | 68,815 | 3,634 | 980 | 9,243 |
| Men | 37,056 | 32,262 | 4,794 | 30,842 | 1,706 | 616 | 3,892 |
| Women | 45,616 | 39,380 | 6,236 | 37,973 | 1,928 | 364 | 5,351 |
| Nonresident alien | 331,844 | 217,163 | 114,681 | 197,678 | 108,687 | 3,391 | 22,088 |
| Men | 228,639 | 150,563 | 78,076 | 131,840 | 81,388 | 2,518 | 12,913 |
| Women | 103,205 | 66,600 | 36,605 | 65,838 | 27,319 | 873 | 9,175 |

[1]Some 214 institutions did not report the racial/ethnic status of their student body. Data for 195 of these nonreporting institutions, representing about 5 percent of total enrollment, were imputed. For those institutions which reported race data in 1982, data have been estimated by applying their 1982 race distribution to their total enrollment reported in 1984.

NOTE—Because of underreporting and nonreporting of racial/ethnic data, totals in this table may be slightly smaller than totals appearing in other tables. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Center for Education Statistics, "Fall Enrollment in Colleges and Universities 1984" survey. (This table was prepared September 1986.)

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 1-27

## ENROLLMENT RATES OF 18 TO 24 YEAR OLDS IN INSTITUTIONS OF HIGHER EDUCATION, BY RACE/ETHNICITY, 1967 - 1985

| Year | All students | | White | | Black | | Hispanic origin | |
|---|---|---|---|---|---|---|---|---|
| | Enrollment as a percent of 18- to 24-year-olds | Enrollment as a percent of high school graduates | Enrollment as a percent of 18- to 24-year-olds | Enrollment as a percent of high school graduates | Enrollment as a percent of 18- to 24-year-olds | Enrollment as a percent of high school graduates | Enrollment as a percent of 18- to 24-year-olds | Enrollment as a percent of high school graduates |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1967 | 25.5 | 33.7 | 26.9 | 34.5 | 13.0 | 23.3 | --- | --- |
| 1968 | 26.0 | 34.2 | 27.5 | 34.9 | 14.5 | 25.2 | --- | --- |
| 1969 | 27.3 | 35.0 | 28.7 | 35.6 | 16.0 | 27.2 | --- | --- |
| 1970 | 25.7 | 32.7 | 27.1 | 33.2 | 15.5 | 26.0 | --- | --- |
| 1971 | 26.2 | 33.2 | 27.2 | 33.5 | 16.2 | 29.2 | --- | --- |
| 1972 | 25.5 | 31.9 | 26.4 | 32.3 | 18.1 | 27.1 | 13.4 | 25.8 |
| 1973 | 24.0 | 29.7 | 25.0 | 30.2 | 16.0 | 24.0 | 16.0 | 29.1 |
| 1974 | 24.6 | 30.5 | 25.2 | 30.5 | 17.9 | 26.6 | 18.1 | 32.3 |
| 1975 | 26.3 | 32.5 | 26.9 | 32.4 | 20.7 | 32.0 | 20.4 | 35.5 |
| 1976 | 26.7 | 33.1 | 27.1 | 33.0 | 22.6 | 33.5 | 19.9 | 35.8 |
| 1977 | 26.1 | 32.5 | 26.5 | 32.2 | 21.3 | 31.5 | 17.2 | 31.5 |
| 1978 | 25.3 | 31.4 | 25.7 | 31.1 | 20.1 | 29.7 | 15.2 | 27.2 |
| 1979 | 25.0 | 31.2 | 25.6 | 31.2 | 19.8 | 29.5 | 16.6 | 30.2 |
| 1980 | 25.6 | 31.6 | 26.2 | 31.8 | 19.2 | 27.6 | 16.1 | 29.8 |
| 1981 | 26.2 | 32.5 | 26.7 | 32.5 | 19.9 | 28.0 | 16.7 | 29.9 |
| 1982 | 26.6 | 33.0 | 27.2 | 33.1 | 19.8 | 28.0 | 16.8 | 29.2 |
| 1983 | 26.2 | 32.5 | 27.0 | 32.9 | 19.2 | 27.0 | 17.2 | 31.4 |
| 1984 | 27.1 | 33.2 | 28.0 | 33.7 | 20.4 | 27.2 | 17.9 | 29.3 |
| 1985 | 27.8 | 33.7 | 28.7 | 34.4 | 19.8 | 26.1 | 16.9 | 26.9 |

## TABLE 1-28

## TOTAL ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION BY RACE/ETHNICITY OF STUDENT AND TYPE AND CONTROL OF INSTITUTION, FALL 1984

| Type and control of institution | Total enrollment | Race/ethnicity | | | | | Nonresident alien |
|---|---|---|---|---|---|---|---|
| | | White, non-Hispanic | Black, non-Hispanic | Hispanic | Asian or Pacific Islander | American Indian/ Alaskan Native | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **All institutions** | **12,161,778** | **9,766,845** | **1,069,885** | **528,786** | **381,748** | **82,672** | **331,844** |
| Universities | 2,863,828 | 2,404,292 | 142,885 | 70,331 | 93,071 | 12,497 | 140,752 |
| Other 4-year institutions | 4,786,967 | 3,858,385 | 470,056 | 170,882 | 123,694 | 24,984 | 138,966 |
| 2-year institutions | 4,510,983 | 3,504,168 | 456,944 | 287,573 | 164,981 | 45,191 | 52,126 |
| **Public institutions** | **9,424,911** | **7,524,802** | **841,336** | **452,514** | **317,454** | **71,642** | **217,163** |
| Universities | 2,135,208 | 1,816,758 | 99,591 | 48,554 | 65,341 | 10,518 | 94,446 |
| Other 4-year institutions | 3,024,653 | 2,391,006 | 324,873 | 126,146 | 89,755 | 19,050 | 73,823 |
| 2-year institutions | 4,265,050 | 3,317,038 | 416,872 | 277,814 | 162,358 | 42,074 | 48,894 |
| **Private institutions** | **2,736,867** | **2,242,043** | **228,549** | **76,272** | **64,292** | **11,030** | **114,681** |
| Universities | 728,620 | 587,534 | 43,294 | 21,777 | 27,730 | 1,979 | 46,306 |
| Other 4-year institutions | 1,762,314 | 1,467,379 | 145,183 | 44,736 | 33,939 | 5,934 | 65,143 |
| 2-year institutions | 245,933 | 187,130 | 40,072 | 9,759 | 2,623 | 3,117 | 3,232 |

NOTE.—Some 214 institutions did not report the racial/ethnic status of their student body. Data for 195 of these nonreporting institutions, representing about 5 percent of total enrollment, were imputed. For those institutions which reported race data in 1982, data have been estimated by applying their 1982 race distribution to their total enrollment reported in 1984. Because of underreporting and nonreporting of racial/ethnic data, totals in this table may be slightly smaller than totals appearing in other tables. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Center for Education Statistics, "Fall Enrollment in Colleges and Universities, 1984" survey. (This table was prepared September 1986.)

SOURCE: Data from Survey of Enrollments in Institutions of Higher Education by Race, Ethnicity and Sex, Academic Year 1984-85, U.S. Department of Education, Office for Civil Rights, Unpublished.

## TABLE 1-29

FULL AND PART TIME ENROLLMENT BY LEVEL, RACE/ETHNICITY AND SEX, FALL 1984

| | Undergraduate | | | Graduate | | | First Professional | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | Men | Total | Women | Men | Total | Women | Men |
| American Indian | 64,014 | 35,385 | 28,629 | 3,516 | 1,869 | 1,647 | 989 | 382 | 607 |
| Black | 832,008 | 490,975 | 341,033 | 51,193 | 31,794 | 19,399 | 13,045 | 6,144 | 6,901 |
| Asian/Pac Isl | 288,308 | 135,423 | 152,885 | 28,152 | 10,614 | 17,538 | 9,074 | 3,412 | 5,662 |
| Hispanic | 532,751 | 289,734 | 243,017 | 30,908 | 16,737 | 14,171 | 9,949 | 3,530 | 6,419 |
| Minority Total | 1,717,081 | 951,517 | 765,564 | 113,769 | 61,014 | 52,755 | 33,057 | 13,468 | 19,589 |
| White, Non-Hispanic | 7,280,952 | 3,800,636 | 3,480,316 | 864,216 | 436,513 | 427,703 | 231,671 | 76,941 | 154,730 |
| Non-resident Alien | 191,118 | 63,806 | 127,312 | 107,348 | 27,023 | 80,325 | 3,344 | 864 | 2,480 |
| Total | 9,189,151 | 4,815,959 | 4,373,192 | 1,085,333 | 524,550 | 560,783 | 268,072 | 91,273 | 176,799 |
| | PERCENT | | | | | | | | |
| American Indian | 0.7 | 0.7 | 0.7 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 |
| Black | 9.1 | 10.2 | 7.8 | 4.7 | 6.1 | 3.5 | 4.9 | 6.7 | 3.9 |
| Asian/Pac Isl | 3.1 | 2.8 | 3.5 | 2.6 | 2.0 | 3.1 | 3.4 | 3.7 | 3.2 |
| Hispanic | 5.8 | 6.0 | 5.6 | 2.8 | 3.2 | 2.5 | 3.7 | 3.9 | 3.6 |
| Minority Total | 18.7 | 19.8 | 17.5 | 10.5 | 11.6 | 9.4 | 12.3 | 14.8 | 11.1 |
| White, Non-Hispanic | 79.2 | 78.9 | 79.6 | 79.6 | 83.2 | 76.3 | 86.4 | 84.3 | 87.5 |
| Non-resident Alien | 2.1 | 1.3 | 2.9 | 9.9 | 5.2 | 14.3 | 1.2 | 0.9 | 1.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

* Excludes students whose racial/ethnic category was not reported, includes Puerto Rico & Trust Teritories.

SOURCE: Minorities in Higher Education, Fourth and Fifth Annual Status Report, American Council on Education

## TABLE 1-30

TOTAL ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY LEVEL OF INSTITUTION AND RACE/ETHNICITY, 1976-84

| Race/Ethnicity and Citizenship | Number Enrolled (in thousands) | | | | | Percent Enrolled | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1976 | 1978 | 1980 | 1982 | 1984 | 1976 | 1978 | 1980 | 1982 | 1984 |
| TOTAL, 4-year inst | 7,090 | 7,187 | 7,565 | 7,648 | 7,561 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White, non-Hispanic | 5,984 | 6,013 | 6,275 | 6,306 | 6,263 | 84.4 | 83.7 | 82.9 | 82.5 | 81.6 |
| Minority | 930 | 973 | 1,050 | 1,073 | 1,108 | 13.1 | 13.5 | 13.9 | 14.0 | 14.5 |
| Black, non-Hispanic | 603 | 611 | 634 | 612 | 613 | 8.5 | 8.5 | 8.4 | 8.0 | 8.0 |
| Hispanic | 173 | 190 | 217 | 229 | 241 | 2.4 | 2.6 | 2.9 | 3.0 | 3.1 |
| Asian/Pacific | 118 | 137 | 162 | 193 | 217 | 1.7 | 1.9 | 2.6 | 2.5 | 2.8 |
| Native American | 35 | 35 | 37 | 38 | 37 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Non-resident Alien | 176 | 200 | 241 | 270 | 280 | 2.5 | 2.8 | 3.2 | 3.5 | 3.6 |
| TOTAL, 2-year inst | 3,880 | 4,028 | 4,521 | 4,740 | 4,511 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White, non-Hispanic | 3,077 | 3,167 | 3,558 | 3,692 | 3,504 | 79.3 | 78.6 | 78.7 | 77.9 | 77.7 |
| Minority | 761 | 810 | 899 | 987 | 955 | 19.6 | 20.1 | 19.9 | 20.8 | 21.1 |
| Black, non-Hispanic | 429 | 443 | 472 | 489 | 457 | 11.1 | 11.0 | 10.4 | 10.3 | 10.1 |
| Hispanic | 210 | 227 | 255 | 291 | 288 | 5.4 | 5.6 | 5.6 | 6.1 | 6.4 |
| Asian/Pacific | 79 | 97 | 124 | 158 | 165 | 2.0 | 2.4 | 2.7 | 3.3 | 3.7 |
| Native American | 41 | 43 | 47 | 49 | 45 | 1.1 | 1.1 | 1.0 | 1.0 | 0.9 |
| Non-resident Alien | 42 | 52 | 64 | 61 | 52 | 1.1 | 1.3 | 1.4 | 1.3 | 1.2 |
| TOTAL, all institutions | 10,970 | 11,215 | 12,087 | 12,388 | 12,162 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 9,061 | 9,180 | 9,833 | 9,997 | 9,767 | 82.6 | 81.9 | 81.3 | 80.7 | 80.3 |
| Minority | 1,691 | 1,783 | 1,949 | 2,059 | 2,063 | 15.4 | 15.9 | 16.1 | 16.9 | 17.0 |
| Black | 1,032 | 1,054 | 1,107 | 1,101 | 1,070 | 9.4 | 9.4 | 9.1 | 8.9 | 8.8 |
| Hispanic | 383 | 417 | 472 | 519 | 529 | 3.5 | 3.7 | 3.9 | 4.2 | 4.3 |
| Asian/Pacific | 197 | 234 | 286 | 351 | 382 | 1.8 | 2.1 | 2.4 | 2.8 | 3.1 |
| Native American | 76 | 78 | 84 | 88 | 83 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Non-resident Alien | 218 | 252 | 305 | 331 | 332 | 2.0 | 2.2 | 2.5 | 2.7 | 2.7 |

SOURCE: Center for Statistics, Department of Education, as published by the Chronicle of Higher Education, October 15, 1986

## TABLE 1-31

ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION BY ATTENDANCE STATUS, TYPE OF CONTROL AND SEX; AND BY STUDENT LEVEL AND SEX, FALL 1985

| | All students | | | Full-time students | | | Part-time students | | |
|---|---|---|---|---|---|---|---|---|---|
| **Public institutions** | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| Doctoral | 2,400,817 | 1,241,164 | 1,159,653 | 1,813,810 | 968,114 | 845,696 | 587,007 | 273,050 | 313,957 |
| Comprehensive | 2,206,206 | 1,017,892 | 1,188,314 | 1,427,475 | 691,703 | 735,772 | 778,731 | 326,189 | 452,542 |
| General baccalaureate | 396,413 | 183,479 | 212,934 | 237,966 | 115,669 | 122,297 | 158,447 | 67,810 | 90,637 |
| Specialized | 197,979 | 129,561 | 68,418 | 160,108 | 111,677 | 48,431 | 37,871 | 17,884 | 19,987 |
| 2-year | 4,249,048 | 1,850,456 | 2,398,592 | 1,465,320 | 710,375 | 754,945 | 2,783,728 | 1,140,081 | 1,634,647 |
| New* | 28,810 | 14,936 | 13,874 | 15,567 | 8,824 | 6,743 | 13,243 | 6,112 | 7,131 |
| All | 9,479,273 | 4,437,488 | 5,041,785 | 5,120,246 | 2,606,362 | 2,513,884 | 4,359,027 | 1,831,126 | 2,527,901 |
| **Private institutions** | | | | | | | | | |
| Doctoral | 632,565 | 346,318 | 286,247 | 467,309 | 264,650 | 202,659 | 165,256 | 81,668 | 83,588 |
| Comprehensive | 657,004 | 325,569 | 331,435 | 419,516 | 211,342 | 208,174 | 237,488 | 114,227 | 123,261 |
| General baccalaureate | 759,927 | 330,271 | 429,656 | 570,472 | 258,513 | 311,959 | 189,455 | 71,758 | 117,697 |
| Specialized | 387,101 | 218,409 | 168,692 | 251,426 | 152,782 | 98,644 | 135,675 | 65,627 | 70,048 |
| 2-year | 260,293 | 111,814 | 148,479 | 204,314 | 90,174 | 114,140 | 55,979 | 21,640 | 34,339 |
| New* | 70,892 | 48,581 | 22,311 | 41,938 | 23,897 | 18,041 | 28,954 | 24,684 | 4,270 |
| All | 2,767,782 | 1,380,962 | 1,386,820 | 1,954,975 | 1,001,358 | 953,617 | 812,807 | 379,604 | 433,203 |
| **All institutions** | | | | | | | | | |
| Doctoral | 3,033,382 | 1,587,482 | 1,445,900 | 2,281,119 | 1,232,764 | 1,048,355 | 752,263 | 354,718 | 397,545 |
| Comprehensive | 2,863,210 | 1,343,461 | 1,519,749 | 1,846,991 | 903,045 | 943,946 | 1,016,219 | 440,416 | 575,803 |
| Gene al baccalaureate | 1,156,340 | 513,750 | 642,590 | 808,438 | 374,182 | 434,256 | 347,902 | 139,568 | 208,334 |
| Specialized | 585,080 | 347,970 | 237,110 | 411,534 | 264,459 | 147,075 | 173,546 | 83,511 | 90,035 |
| 2-year | 4,509,341 | 1,962,270 | 2,547,071 | 1,669,634 | 800,549 | 869,085 | 2,839,707 | 1,161,721 | 1,677,986 |
| New* | 99,702 | 63,517 | 36,185 | 57,505 | 32,721 | 24,784 | 42,197 | 30,796 | 11,401 |
| All | 12,247,055 | 5,818,450 | 6,428,605 | 7,075,221 | 3,607,720 | 3,467,501 | 5,171,834 | 2,210,730 | 2,961,104 |
| ***By student level*** | | | | | | | | | |
| **Undergraduates** | | | | | | | | | |
| Doctoral institutions | 2,094,738 | 1,087,728 | 1,007,010 | 1,799,134 | 946,153 | 852,981 | 295,604 | 141,575 | 154,029 |
| Comprehensive | 2,175,200 | 1,039,286 | 1,135,914 | 1,684,363 | 818,253 | 866,110 | 490,837 | 221,033 | 269,804 |
| General baccalaureate | 993,686 | 445,539 | 548,147 | 781,248 | 359,611 | 421,637 | 212,438 | 85,928 | 126,510 |
| Specialized | 342,778 | 205,052 | 137,726 | 276,008 | 173,101 | 102,907 | 66,770 | 31,951 | 34,819 |
| 2-year | 3,722,108 | 1,636,456 | 2,085,652 | 1,571,521 | 751,684 | 819,837 | 2,150,587 | 884,722 | 1,265,815 |
| New* | 85,564 | 56,013 | 29,551 | 50,117 | 27,918 | 22,199 | 35,447 | 28,095 | 7,352 |
| All | 9,414,074 | 4,470,074 | 4,944,000 | 6,162,391 | 3,076,720 | 3,085,671 | 3,251,683 | 1,393,354 | 1,858,329 |
| **First-time freshmen** | | | | | | | | | |
| All | 2,292,222 | 1,075,736 | 1,216,486 | 1,602,038 | 774,858 | 827,180 | 690,184 | 300,878 | 389,306 |
| **Graduate students** | | | | | | | | | |
| Doctoral institutions | 600,228 | 325,960 | 274,268 | 327,090 | 192,084 | 135,006 | 273,138 | 133,876 | 139,262 |
| Comprehensive | 381,945 | 170,448 | 211,497 | 86,932 | 43,496 | 43,436 | 295,013 | 126,952 | 168,061 |
| General baccalaureate | 37,809 | 16,284 | 21,525 | 7,197 | 3,911 | 3,286 | 30,612 | 12,373 | 18,239 |
| Specialized | 101,662 | 59,895 | 41,767 | 46,672 | 28,795 | 17,877 | 54,990 | 31,100 | 23,890 |
| 2-year | 3,677 | 2,630 | 1,047 | 534 | 245 | 289 | 3,143 | 2,385 | 758 |
| New* | 4,217 | 2,007 | 2,210 | 2,542 | 1,288 | 1,254 | 1,675 | 719 | 956 |
| All | 1,129,538 | 577,224 | 552,314 | 470,967 | 269,819 | 201,148 | 658,571 | 307,405 | 351,166 |
| **First professional** | | | | | | | | | |
| Doctoral institutions | 129,508 | 81,100 | 48,408 | 121,962 | 76,771 | 45,191 | 7,546 | 4,329 | 3,217 |
| Comprehensive | 40,438 | 25,162 | 15,276 | 33,670 | 21,029 | 12,641 | 6,768 | 4,133 | 2,635 |
| General baccalaureate | 7,709 | 5,320 | 2,389 | 6,314 | 4,317 | 1,997 | 1,395 | 1,003 | 392 |
| Specialized | 93,088 | 65,788 | 27,300 | 81,783 | 58,199 | 23,584 | 11,305 | 7,589 | 3,716 |
| New* | 3,457 | 2,422 | 1,035 | 2,890 | 2,052 | 838 | 567 | 370 | 197 |
| All | 274,200 | 179,792 | 94,408 | 246,619 | 162,638 | 84,251 | 27,581 | 17,424 | 10,157 |
| **Unclassified** | | | | | | | | | |
| All | 1,429,243 | 591,360 | 837,883 | 195,244 | 98,813 | 96,431 | 1,233,999 | 492,547 | 741,452 |

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 1-32

## TOTAL ENROLLMENT IN SELECTED FIELDS IN INSTITUTIONS OF HIGHER EDUCATION, BY SEX, FALL 1976, 1978, 1980 AND 1984

| Selected major fields of study | 1976 | | | 1978[1] | | | 1980 | | | 1984[2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| **Total enrollment** | 11,012,137 | 5,810,828 | 5,201,309 | 11,257,111 | 5,638,971 | 5,618,140 | 12,096,895 | 5,874,374 | 6,222,521 | 11,838,513 | 5,641,852 | 6,196,661 |
| **Percent** | 100.0 | 52.8 | 47.2 | 100.0 | 50.1 | 49.9 | 100.0 | 48.6 | 51.4 | 100.0 | 47.7 | 52.3 |
| Agriculture and natural resources | | | | | | | | | | | | |
| Enrollment | 155,782 | 116,186 | 39,596 | 145,784 | 103,472 | 42,312 | 143,902 | 98,041 | 45,861 | — | — | — |
| Percent | 100.0 | 74.6 | 25.4 | 100.0 | 71.0 | 29.0 | 100.0 | 68.1 | 31.9 | — | — | — |
| Architecture and environmental design | | | | | | | | | | | | |
| Enrollment | 68,796 | 52,845 | 15,951 | 66,106 | 48,772 | 17,334 | 74,611 | 51,884 | 22,727 | 56,902 | 37,636 | 19,266 |
| Percent | 100.0 | 76.8 | 23.2 | 100.0 | 73.8 | 26.2 | 100.0 | 69.5 | 30.5 | 100.0 | 66.1 | 33.9 |
| Biological sciences | | | | | | | | | | | | |
| Enrollment | 318,042 | 189,808 | 128,234 | 294,433 | 165,240 | 129,193 | 270,419 | 142,636 | 127,783 | 233,458 | 118,704 | 114,754 |
| Percent | 100.0 | 59.7 | 40.3 | 100.0 | 56.1 | 43.9 | 100.0 | 52.7 | 47.3 | 100.0 | 50.8 | 49.2 |
| Business and management | | | | | | | | | | | | |
| Enrollment | 1,281,788 | 860,134 | 421,654 | 1,475,530 | 900,913 | 574,617 | 1,661,705 | 919,357 | 742,348 | 1,295,578 | 716,973 | 578,605 |
| Percent | 100.0 | 67.1 | 32.9 | 100.0 | 61.1 | 38.9 | 100.0 | 55.3 | 44.7 | 100.0 | 55.3 | 44.7 |
| Dentistry | | | | | | | | | | | | |
| Enrollment | 20,272 | 18,049 | 2,223 | 21,793 | 18,735 | 3,058 | 22,668 | 18,812 | 3,856 | 19,997 | 15,217 | 4,780 |
| Percent | 100.0 | 89.0 | 11.0 | 100.0 | 86.0 | 14.0 | 100.0 | 83.0 | 17.0 | 100.0 | 76.1 | 23.9 |
| Engineering | | | | | | | | | | | | |
| Enrollment | 451,743 | 417,200 | 34,543 | 517,935 | 462,814 | 55,121 | 616,234 | 538,820 | 77,414 | 516,266 | 441,232 | 75,034 |
| Percent | 100.0 | 92.4 | 7.6 | 100.0 | 89.4 | 10.6 | 100.0 | 87.4 | 12.6 | 100.0 | 85.5 | 14.5 |
| Law | | | | | | | | | | | | |
| Enrollment | 119,581 | 88,679 | 30,902 | 118,420 | 82,396 | 36,024 | 118,993 | 78,569 | 40,424 | 117,673 | 71,443 | 46,230 |
| Percent | 100.0 | 74.2 | 25.8 | 100.0 | 69.6 | 30.4 | 100.0 | 66.0 | 34.0 | 100.0 | 60.7 | 39.3 |
| Medicine | | | | | | | | | | | | |
| Enrollment | 58,085 | 45,145 | 12,940 | 66,713 | 51,241 | 15,472 | 74,132 | 55,060 | 19,072 | 67,877 | 46,492 | 21,385 |
| Percent | 100.0 | 77.7 | 22.3 | 100.0 | 76.8 | 23.2 | 100.0 | 74.3 | 25.7 | 100.0 | 68.5 | 31.5 |
| Physical sciences | | | | | | | | | | | | |
| Enrollment | 164,342 | 127,393 | 36,949 | 163,554 | 123,363 | 40,191 | 173,356 | 125,591 | 47,765 | 143,743 | 105,605 | 38,138 |
| Percent | 100.0 | 77.5 | 22.5 | 100.0 | 75.4 | 24.6 | 100.0 | 72.4 | 27.6 | 100.0 | 73.5 | 26.5 |
| Veterinary medicine | | | | | | | | | | | | |
| Enrollment | 6,126 | 4,425 | 1,701 | 7,186 | 4,762 | 2,424 | 8,164 | 4,980 | 3,184 | 9,190 | 4,762 | 4,428 |
| Percent | 100.0 | 72.2 | 27.8 | 100.0 | 66.3 | 33.7 | 100.0 | 61.0 | 39.0 | 100.0 | 51.8 | 48.2 |
| All other | | | | | | | | | | | | |
| Enrollment | 8,367,580 | 3,890,964 | 4,476,616 | 8,379,657 | 3,677,263 | 4,702,394 | 8,932,711 | 3,840,624 | 5,092,087 | 9,377,829 | 4,083,788 | 5,234,041 |
| Percent | 100.0 | 46.5 | 53.5 | 100.0 | 43.9 | 56.1 | 100.0 | 43.0 | 57.0 | 100.0 | 43.5 | 56.5 |

[1]Excludes approximately 0.03 percent of students whose major field of study was not reported.
[2]Excludes approximately 3.3 percent of students whose major field of study was not reported.
— Data not available

SOURCE: U.S. Department of Education, Center for Education Statistics, "Fall Enrollment in Colleges and Universities" surveys. (This table was prepared September 1986.)

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 1-33

### TOTAL ENROLLMENT IN SELECTED FIELDS IN INSTITUTIONS OF HIGHER EDUCATION, BY LEVEL, SEX, AND ATTENDENCE STATUS, FALL 1984

| Level, sex, and attendance status of student | All fields[1] | Architecture and environmental design | Biological sciences | Business and management | Dentistry | Engineering | Law | Mathematics | Medicine | Physical sciences | Veterinary medicine | All other fields |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| **All students** | **11,838,513** | **56,902** | **233,458** | **1,295,578** | **19,997** | **516,266** | **117,673** | **96,797** | **67,877** | **143,743** | **9,190** | **9,281,032** |
| Men | 5,641,852 | 37,636 | 118,704 | 716,973 | 15,217 | 441,232 | 71,443 | 56,052 | 46,492 | 105,605 | 4,762 | 4,027,736 |
| Full-time | 3,538,269 | 32,670 | 100,244 | 496,739 | 15,075 | 355,254 | 60,209 | 44,768 | 46,033 | 85,682 | 4,703 | 2,296,892 |
| Part-time | 2,103,583 | 4,966 | 18,460 | 220,234 | 142 | 85,978 | 11,234 | 11,284 | 459 | 19,923 | 59 | 1,730,844 |
| Women | 6,196,661 | 19,266 | 114,754 | 578,605 | 4,780 | 75,034 | 46,230 | 40,745 | 21,385 | 38,138 | 4,428 | 5,253,296 |
| Full-time | 3,381,231 | 15,725 | 94,544 | 393,120 | 4,747 | 62,913 | 38,835 | 33,231 | 21,090 | 30,598 | 4,367 | 2,682,061 |
| Part-time | 2,815,430 | 3,541 | 20,210 | 185,485 | 33 | 12,121 | 7,395 | 7,514 | 295 | 7,540 | 61 | 2,571,235 |
| Undergraduate students | 9,183,143 | 46,008 | 187,568 | 1,049,609 | --- | 428,712 | --- | 80,404 | --- | 100,231 | --- | 7,290,611 |
| Men | 4,366,212 | 30,681 | 92,570 | 558,840 | --- | 363,880 | --- | 45,029 | --- | 71,897 | --- | 3,203,315 |
| Full-time | 3,027,145 | 27,063 | 82,665 | 446,311 | --- | 314,046 | --- | 38,391 | --- | 61,972 | --- | 2,056,697 |
| Part-time | 1,339,067 | 3,618 | 9,905 | 112,529 | --- | 49,834 | --- | 6,638 | --- | 9,925 | --- | 1,146,618 |
| Women | 4,816,931 | 15,327 | 94,998 | 490,769 | --- | 64,832 | --- | 35,375 | --- | 28,334 | --- | 4,087,296 |
| Full-time | 3,020,770 | 12,740 | 82,736 | 368,665 | --- | 57,669 | --- | 30,843 | --- | 24,206 | --- | 2,443,911 |
| Part-time | 1,796,161 | 2,587 | 12,262 | 122,104 | --- | 7,163 | --- | 4,532 | --- | 4,128 | --- | 1,643,385 |
| Graduate students | 1,104,180 | 10,064 | 39,042 | 207,949 | --- | 78,795 | --- | 14,246 | --- | 40,964 | --- | 713,120 |
| Men | 570,488 | 6,521 | 22,353 | 137,756 | --- | 69,899 | --- | 9,784 | --- | 31,985 | --- | 292,190 |
| Full-time | 264,183 | 5,378 | 15,595 | 46,195 | --- | 38,608 | --- | 6,054 | --- | 23,144 | --- | 129,209 |
| Part-time | 306,305 | 1,143 | 6,758 | 91,561 | --- | 31,291 | --- | 3,730 | --- | 8,841 | --- | 162,981 |
| Women | 533,692 | 3,543 | 16,689 | 70,193 | --- | 8,896 | --- | 4,462 | --- | 8,979 | --- | 420,930 |
| Full-time | 195,252 | 2,827 | 10,844 | 21,723 | --- | 4,767 | --- | 2,202 | --- | 6,169 | --- | 146,720 |
| Part-time | 338,440 | 716 | 5,845 | 48,470 | --- | 4,129 | --- | 2,260 | --- | 2,810 | --- | 274,210 |
| First-professional students | 268,248 | 1 | 789 | 16 | 19,997 | --- | 117,673 | 3 | 67,877 | 2 | 9,190 | 52,700 |
| Men | 176,898 | 1 | 565 | 11 | 15,217 | --- | 71,443 | --- | 46,492 | 1 | 4,762 | 38,406 |
| Full-time | 160,465 | 1 | 565 | 11 | 15,075 | --- | 60,209 | --- | 46,033 | 1 | 4,703 | 33,867 |
| Part-time | 16,433 | --- | --- | --- | 142 | --- | 11,234 | --- | 459 | --- | 59 | 4,539 |
| Women | 91,350 | --- | 224 | 5 | 4,780 | --- | 46,230 | 3 | 21,385 | 1 | 4,428 | 14,294 |
| Full-time | 81,824 | --- | 224 | 5 | 4,747 | --- | 38,835 | --- | 21,090 | --- | 4,367 | 12,556 |
| Part-time | 9,526 | --- | --- | --- | 33 | --- | 7,395 | 3 | 295 | 1 | 61 | 1,738 |
| Unclassified students | 1,282,942 | 829 | 6,059 | 38,004 | --- | 8,759 | --- | 2,144 | --- | 2,546 | --- | 1,224,601 |
| Men | 528,254 | 433 | 3,216 | 20,366 | --- | 7,453 | --- | 1,239 | --- | 1,722 | --- | 493,825 |
| Full-time | 86,476 | 228 | 1,419 | 4,222 | --- | 2,600 | --- | 323 | --- | 565 | --- | 77,119 |
| Part-time | 441,778 | 205 | 1,797 | 16,144 | --- | 4,853 | --- | 916 | --- | 1,157 | --- | 416,706 |
| Women | 754,688 | 396 | 2,843 | 17,638 | --- | 1,306 | --- | 905 | --- | 824 | --- | 730,776 |
| Full-time | 83,385 | 158 | 740 | 2,727 | --- | 477 | --- | 186 | --- | 223 | --- | 78,874 |
| Part-time | 671,303 | 238 | 2,103 | 14,911 | --- | 829 | --- | 719 | --- | 601 | --- | 651,902 |

[1]Excludes approximately 3.3 percent of students whose major field of study was not reported.
--- Data not reported or not applicable

SOURCE: U.S. Department of Education, Center for Education Statistics, "Fall Enrollment in Colleges and Universities, 1984" survey. (This table was prepared September 1986.)

SOURCE: A Summary of Data Collected from Graduate Record Examinations Test Takers During 1984-85, Educational Testing Service, April 1986

## TABLE 1-34

GRADUATE RECORD EXAMINATION SCORES (GRE-V MEAN, S.D.) BY SEX, 1985

| UNDERGRADUATE MAJOR | | MALE | FEMALE | NO RESPONSE | TOTAL |
|---|---|---|---|---|---|
| ARTS | N | 2603 | 3869 | 26 | 6498 |
| | MEAN | 494 | 491 | 495 | 492 |
| | S.D. | 119 | 115 | 134 | 117 |
| OTHER HUMANITIES | N | 8666 | 12020 | 97 | 20783 |
| | MEAN | 535 | 539 | 557 | 537 |
| | S.D. | 131 | 124 | 124 | 127 |
| EDUCATION | N | 4644 | 15520 | 103 | 20267 |
| | MEAN | 431 | 437 | 432 | 436 |
| | S.D. | 101 | 99 | 110 | 100 |
| SOCIAL SCIENCE | N | 5618 | 7005 | 48 | 12671 |
| | MEAN | 454 | 451 | 444 | 453 |
| | S.D. | 115 | 113 | 125 | 114 |
| BEHAVIORAL SCIENCE | N | 17568 | 22799 | 170 | 40537 |
| | MEAN | 506 | 501 | 503 | 503 |
| | S.D. | 121 | 115 | 121 | 118 |
| BIOLOGICAL SCIENCE | N | 7740 | 8342 | 56 | 16138 |
| | MEAN | 502 | 511 | 494 | 507 |
| | S.D. | 111 | 110 | 96 | 111 |
| HEALTH | N | 1916 | 13190 | 63 | 15169 |
| | MEAN | 460 | 473 | 477 | 471 |
| | S.D. | 112 | 99 | 105 | 101 |
| APPLIED BIOLOGY | N | 2619 | 2692 | 19 | 5330 |
| | MEAN | 438 | 454 | 447 | 446 |
| | S.D. | 108 | 106 | 118 | 108 |
| ENGINEERING | N | 16755 | 2489 | 69 | 19313 |
| | MEAN | 458 | 499 | 431 | 463 |
| | S.D. | 126 | 125 | 134 | 127 |
| MATH SCIENCE | N | 6611 | 3677 | 31 | 10319 |
| | MEAN | 489 | 478 | 472 | 485 |
| | S.D. | 136 | 129 | 158 | 134 |
| PHYSICAL SCIENCE | N | 8121 | 3189 | 38 | 11348 |
| | MEAN | 501 | 509 | 449 | 503 |
| | S.D. | 122 | 121 | 119 | 122 |
| NOT IN ABOVE | N | 1731 | 2022 | 16 | 3769 |
| | MEAN | 453 | 460 | 453 | 457 |
| | S.D. | 122 | 116 | 99 | 119 |
| UNDECIDED | N | 14 | 22 | 0 | 36 |
| | MEAN | 388 | 421 | 0 | 408 |
| | S.D. | 123 | 137 | 0 | 133 |
| NO RESPONSE | N | 4987 | 5851 | 62 | 10900 |
| | MEAN | 480 | 495 | 504 | 488 |
| | S.D. | 136 | 121 | 134 | 128 |
| TOTAL | N | 89593 | 102687 | 798 | 193078 |
| | MEAN | 485 | 486 | 482 | 486 |
| | S.D. | 126 | 117 | 128 | 121 |

SOURCE: Graduate Science Education, Student Support and Postdoctorals, Detailed Statistical Tables, Fall 1980 (NSF 81-330), and Fall 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-35

### TOTAL GRADUATE ENROLLMENTS IN SCIENCE AND ENGINEERING AND PERCENT WOMEN BY LEVEL OF DEPARTMENT, 1980 AND 1985

| FIELD | FALL 1980 | | | | | | FALL 1985 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALL GRAD DEPTS. | | Ph.D. DEPTS. | | MASTER'S DEPTS. | | ALL GRAD DEPTS. | | Ph.D. DEPTS. | | MASTER'S DEPTS. | |
| | Total | % W | Total | % W | Total | % W | Total | % W | Total | % W | Total | % W |
| Total S/E Fields | 383,210 | 34.9 | 333,658 | 33.6 | 49,552 | 43.6 | 434,836 | 37.5 | 371,052 | 35.8 | 63,783 | 47.1 |
| Engineering | 77,174 | 9.0 | 72,271 | 9.1 | 4,903 | 7.3 | 100,368 | 12.0 | 91,799 | 11.8 | 8,569 | 14.0 |
| Physical Science | 27,063 | 17.1 | 25,443 | 16.6 | 1,620 | 25.0 | 31,300 | 21.0 | 29,421 | 20.5 | 1,879 | 30.0 |
| Environ. Science | 13,680 | 22.8 | 12,349 | 22.6 | 1,331 | 25.1 | 16,008 | 25.9 | 14,255 | 25.5 | 1,753 | 29.3 |
| Math Science | 15,360 | 22.7 | 13,625 | 25.4 | 1,735 | 36.4 | 18,123 | 30.6 | 15,285 | 29.1 | 2,839 | 38.3 |
| Computer Science | 13,578 | 26.6 | 11,384 | 21.8 | 2,194 | 55.9 | 29,427 | 24.4 | 23,756 | 24.8 | 5,564 | 21.4 |
| Agric. Science | 12,365 | 23.0 | 11,644 | 23.4 | 721 | 22.1 | 11,474 | 25.7 | 10,688 | 25.9 | 786 | 22.9 |
| Biological Sci. | 47,643 | 38.8 | 42,055 | 38.2 | 5,588 | 42.9 | 47,878 | 43.2 | 42,863 | 42.4 | 5,015 | 50.5 |
| Health Science | 42,693 | 71.0 | 36,953 | 70.3 | 5,740 | 75.2 | 47,910 | 76.1 | 40,203 | 75.0 | 7,707 | 81.8 |
| Psychology | 40,544 | 53.2 | 29,339 | 51.6 | 11,205 | 62.0 | 44,328 | 60.7 | 30,222 | 59.2 | 14,107 | 63.9 |
| Social Science | 93,175 | 41.7 | 78,653 | 41.7 | 14,522 | 41.6 | 88,020 | 45.9 | 72,560 | 45.5 | 15,459 | 47.7 |

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall, 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-36

FULL TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD, LEVEL, CITIZENSHIP, SEX, AND TYPE OF CONTROL, FALL 1985

| FIELD | TOTAL | LEVEL OF STUDY | | CITIZENSHIP | | SEX | | TYPE OF CONTROL | |
|---|---|---|---|---|---|---|---|---|---|
| | | FIRST YEAR | BEYOND FIRST YEAR | U.S. | FOREIGN | MEN | WOMEN | PUBLIC | PRIVATE |
| TOTAL, ALL FIELDS | 269,319 | 85,498 | 183,821 | 200,490 | 68,829 | 175,253 | 94,066 | 193,869 | 75,450 |
| ENGINEERING | 57,524 | 18,757 | 38,766 | 33,129 | 24,395 | 50,797 | 6,727 | 39,964 | 17,560 |
| AEROSPACE | 1,995 | 720 | 1,275 | 1,258 | 737 | 1,871 | 124 | 1,476 | 519 |
| AGRICULTURAL | 767 | 238 | 529 | 414 | 353 | 709 | 58 | 714 | 53 |
| BIOMEDICAL | 1,129 | 359 | 770 | 936 | 194 | 884 | 245 | 657 | 472 |
| CHEMICAL | 5,566 | 1,523 | 4,043 | 3,352 | 2,214 | 4,807 | 759 | 3,825 | 1,741 |
| CIVIL | 10,229 | 3,711 | 6,518 | 5,699 | 4,530 | 8,588 | 1,641 | 7,602 | 2,627 |
| ELECTRICAL | 14,866 | 4,871 | 9,996 | 8,157 | 6,711 | 13,656 | 1,212 | 9,719 | 5,148 |
| ENGINEERING SCIENCE | 1,331 | 358 | 973 | 851 | 480 | 1,198 | 133 | 672 | 659 |
| INDUSTRIAL | 4,522 | 1,613 | 2,909 | 2,689 | 1,834 | 3,617 | 906 | 3,148 | 1,375 |
| MECHANICAL | 8,722 | 2,957 | 5,765 | 4,771 | 3,951 | 8,161 | 561 | 6,259 | 2,463 |
| METALLURGICAL/MATERIALS | 3,087 | 791 | 2,297 | 1,801 | 1,287 | 2,650 | 437 | 1,926 | 1,161 |
| MINING | 391 | 116 | 275 | 256 | 135 | 363 | 28 | 331 | 60 |
| NUCLEAR | 1,030 | 274 | 756 | 600 | 430 | 939 | 91 | 820 | 210 |
| PETROLEUM | 577 | 132 | 445 | 327 | 250 | 530 | 47 | 430 | 147 |
| ENGINEERING, N.E.C. | 3,310 | 1,094 | 2,216 | 2,020 | 1,291 | 2,825 | 486 | 2,385 | 925 |
| SCIENCES, TOTAL | 211,796 | 66,740 | 145,056 | 167,362 | 44,434 | 124,456 | 87,339 | 153,905 | 57,890 |
| PHYSICAL SCIENCES | 26,720 | 6,667 | 20,052 | 18,222 | 8,498 | 21,281 | 5,438 | 19,067 | 7,653 |
| ASTRONOMY | 635 | 155 | 480 | 485 | 150 | 531 | 104 | 410 | 225 |
| CHEMISTRY | 15,639 | 3,917 | 11,722 | 11,521 | 4,118 | 11,639 | 4,000 | 11,410 | 4,230 |
| PHYSICS | 10,271 | 2,533 | 7,738 | 6,067 | 4,204 | 8,989 | 1,282 | 7,096 | 3,175 |
| PHYSICAL SCIENCES, N.E.C. | 175 | 62 | 112 | 149 | 25 | 123 | 52 | 152 | 23 |
| ENVIRONMENTAL SCIENCES | 11,557 | 3,287 | 8,271 | 9,862 | 1,695 | 8,621 | 2,936 | 9,556 | 2,001 |
| ATMOSPHERIC SCIENCES | 872 | 286 | 586 | 676 | 196 | 733 | 139 | 819 | 53 |
| GEOSCIENCES | 7,744 | 2,118 | 5,626 | 6,796 | 948 | 5,847 | 1,897 | 6,232 | 1,512 |
| OCEANOGRAPHY | 1,686 | 421 | 1,265 | 1,374 | 312 | 1,180 | 506 | 1,381 | 305 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 1,256 | 462 | 794 | 1,017 | 239 | 862 | 394 | 1,125 | 131 |
| MATHEMATICAL SCIENCES | 11,975 | 4,048 | 7,927 | 7,083 | 4,892 | 8,701 | 3,274 | 9,018 | 2,957 |
| COMPUTER SCIENCES | 14,076 | 4,676 | 9,401 | 8,715 | 5,362 | 11,035 | 3,041 | 9,815 | 4,262 |
| LIFE SCIENCES | 70,301 | 21,853 | 48,448 | 58,900 | 11,401 | 36,037 | 34,264 | 54,630 | 15,671 |
| AGRICULTURAL SCIENCES | 9,120 | 2,400 | 6,720 | 6,806 | 2,314 | 6,738 | 2,382 | 8,815 | 305 |
| BIOLOGICAL SCIENCES | 37,916 | 9,946 | 27,970 | 31,450 | 6,466 | 22,349 | 15,566 | 27,959 | 9,957 |
| ANATOMY | 903 | 200 | 703 | 811 | 92 | 517 | 386 | 585 | 318 |
| BIOCHEMISTRY | 4,491 | 1,092 | 3,399 | 3,515 | 976 | 2,829 | 1,662 | 3,100 | 1,391 |
| BIOLOGY | 8,893 | 2,509 | 6,384 | 7,737 | 1,156 | 5,271 | 3,622 | 6,215 | 2,678 |
| BIOMETRY/EPIDEMIOLOGY | 996 | 367 | 629 | 823 | 173 | 458 | 538 | 527 | 469 |
| BIOPHYSICS | 407 | 72 | 335 | 312 | 95 | 306 | 101 | 230 | 177 |
| BOTANY | 2,858 | 675 | 2,184 | 2,225 | 633 | 1,808 | 1,051 | 2,656 | 203 |
| CELL BIOLOGY | 1,472 | 355 | 1,117 | 1,275 | 197 | 938 | 534 | 759 | 713 |
| ECOLOGY | 869 | 202 | 667 | 769 | 100 | 556 | 313 | 817 | 52 |
| ENTOMOLOGY/PARASITOLOGY | 1,155 | 249 | 906 | 919 | 236 | 868 | 287 | 1,104 | 51 |
| GENETICS | 1,014 | 247 | 767 | 851 | 163 | 565 | 449 | 752 | 262 |
| MICROBIOLOGY | 3,891 | 954 | 2,937 | 3,241 | 650 | 2,242 | 1,649 | 2,933 | 958 |
| NUTRITION | 3,114 | 950 | 2,164 | 2,165 | 949 | 1,136 | 1,978 | 2,479 | 635 |
| PATHOLOGY | 1,054 | 261 | 793 | 864 | 190 | 642 | 412 | 725 | 329 |
| PHARMACOLOGY | 1,996 | 497 | 1,499 | 1,746 | 250 | 1,238 | 758 | 1,345 | 651 |
| PHYSIOLOGY | 1,998 | 630 | 1,368 | 1,733 | 265 | 1,253 | 745 | 1,346 | 652 |
| ZOOLOGY | 1,773 | 410 | 1,363 | 1,585 | 185 | 1,142 | 631 | 1,666 | 107 |
| BIOSCIENCES, N.E.C. | 1,032 | 277 | 755 | 876 | 156 | 581 | 451 | 720 | 312 |
| HEALTH SCIENCES | 23,265 | 9,507 | 13,758 | 20,644 | 2,621 | 6,950 | 16,316 | 17,856 | 5,409 |
| DENTISTRY | 745 | 314 | 431 | 590 | 155 | 584 | 161 | 514 | 231 |
| NEUROLOGY | 335 | 91 | 244 | 301 | 34 | 206 | 129 | 202 | 133 |
| NURSING | 5,851 | 2,461 | 3,389 | 5,680 | 171 | 274 | 5,577 | 4,397 | 1,454 |
| PHARMACEUTICAL SCIENCES | 1,826 | 456 | 1,370 | 1,159 | 667 | 1,217 | 609 | 1,562 | 264 |
| PREVENTIVE MEDICINE/ COMMUNITY HEALTH | 3,932 | 2,022 | 1,910 | 3,149 | 783 | 1,641 | 2,291 | 2,706 | 1,226 |
| SPEECH PATHOLOGY/AUDIOLOGY | 5,253 | 2,257 | 2,996 | 5,030 | 223 | 748 | 4,505 | 4,375 | 878 |
| VETERINARY SCIENCES | 512 | 127 | 385 | 379 | 133 | 326 | 186 | 429 | 83 |
| CLINICAL MEDICINE, N.E.C. | 1,160 | 387 | 773 | 967 | 193 | 594 | 566 | 784 | 376 |
| HEALTH RELATED, N.E.C. | 3,652 | 1,392 | 2,260 | 3,389 | 262 | 1,360 | 2,292 | 2,887 | 764 |
| PSYCHOLOGY | 26,393 | 8,100 | 18,293 | 25,163 | 1,230 | 10,577 | 15,817 | 16,755 | 9,639 |
| SOCIAL SCIENCES | 50,774 | 18,110 | 32,664 | 39,417 | 11,357 | 28,204 | 22,570 | 35,065 | 15,708 |
| AGRICULTURAL ECONOMICS | 1,985 | 661 | 1,324 | 1,219 | 766 | 1,550 | 435 | 1,887 | 98 |
| ANTHROPOLOGY | 3,912 | 981 | 2,931 | 3,464 | 448 | 1,793 | 2,119 | 2,755 | 1,157 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 8,982 | 2,690 | 6,291 | 5,055 | 3,926 | 6,889 | 2,093 | 5,877 | 3,105 |
| GEOGRAPHY | 2,191 | 734 | 1,457 | 1,824 | 367 | 1,480 | 711 | 1,998 | 193 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 265 | 70 | 195 | 208 | 57 | 178 | 87 | 149 | 116 |
| LINGUISTICS | 2,352 | 722 | 1,630 | 1,432 | 920 | 995 | 1,357 | 1,517 | 835 |
| POLITICAL SCIENCE | 12,451 | 4,956 | 7,495 | 10,051 | 2,401 | 7,963 | 4,488 | 7,213 | 5,239 |
| SOCIOLOGY | 4,708 | 1,181 | 3,527 | 3,499 | 1,209 | 2,300 | 2,408 | 3,426 | 1,282 |
| SOCIOLOGY/ANTHROPOLOGY | 546 | 180 | 366 | 418 | 128 | 257 | 289 | 374 | 172 |
| SOCIAL SCIENCES, N.E.C. | 13,383 | 5,934 | 7,448 | 12,247 | 1,135 | 4,800 | 8,583 | 9,871 | 3,512 |

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall 1980, 1984 and 1986, National Science Foundation

## TABLE 1-37

FULL TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS BY FIELD AND SEX, 1973-1986

TOTAL

| Year | Total | Eng | Phys# | Envir | Math* | Comp | Agri | Biol | Health | Psych | Social |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1973 | 151609 | 29448 | 27173 | | 11495 | | | | | 13760 | 30912 |
| 1974 | 195455 | 33635 | 21255 | 8381 | 10003 | 3736 | 7614 | 32175 | 15241 | 18866 | 44549 |
| 1975 | 210307 | 37105 | 21317 | 8919 | 10038 | 4114 | 8507 | 34541 | 16587 | 19672 | 49507 |
| 1976 | 214082 | 36489 | 21623 | 9439 | 10156 | 4379 | 9042 | 35231 | 17744 | 21406 | 48573 |
| 1977 | 217453 | 36675 | 21747 | 10019 | 9814 | 4196 | 9296 | 36228 | 18779 | 21266 | 49433 |
| 1978 | 216608 | 37057 | 21497 | 9997 | 9296 | 4426 | 9259 | 35974 | 19982 | 20711 | 48409 |
| 1979 | 223409 | 39344 | 21797 | 10171 | 9136 | 5073 | 9371 | 35837 | 21263 | 20737 | 50680 |
| 1980 | 230535 | 41939 | 22254 | 10265 | 9368 | 5900 | 9591 | 35817 | 22303 | 21580 | 51518 |
| 1981 | 234194 | 44817 | 22600 | 10491 | 9680 | 6465 | 9630 | 35454 | 22111 | 21544 | 51402 |
| 1982 | 236939 | 48687 | 23330 | 10873 | 10174 | 7908 | 9500 | 35226 | 20927 | 21103 | 49211 |
| 1983 | 243613 | 53516 | 24492 | 11466 | 10312 | 9267 | 9397 | 35187 | 20577 | 21319 | 48080 |
| 1984 | 247856 | 54757 | 25149 | 11283 | 10613 | 10108 | 9327 | 36953 | 20888 | 21592 | 47186 |
| 1985 | 251147 | 55940 | 25967 | 10918 | 11168 | 12433 | 8723 | 35983 | 21406 | 21524 | 47085 |
| 1986 | 259980 | 59925 | 27074 | 10909 | 11767 | 13504 | 8858 | 36916 | 21431 | 22007 | 47589 |

WOMEN

| Year | Total | Eng | Phys# | Envir | Math* | Comp | Agri | Biol | Health | Psych | Social |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1973 | 28704 | 827 | 3000 | | 2063 | | | | | 4994 | 8249 |
| 1974 | 46278 | 1353 | 2534 | 1038 | 2019 | 505 | 870 | 9148 | 7388 | 7425 | 13998 |
| 1975 | 52222 | 1873 | 2680 | 1217 | 2121 | 599 | 1130 | 10021 | 8600 | 8318 | 15663 |
| 1976 | 57830 | 2038 | 2916 | 1503 | 2213 | 682 | 1423 | 10929 | 10249 | 9239 | 16638 |
| 1977 | 63150 | 2325 | 3051 | 1727 | 2133 | 676 | 1725 | 11854 | 11736 | 9662 | 18261 |
| 1978 | 67000 | 2900 | 3100 | 1900 | 2000 | 800 | 1900 | 12000 | 13000 | 9900 | 19700 |
| 1979 | 71075 | 3477 | 3330 | 2147 | 1996 | 910 | 2111 | 12769 | 14070 | 10125 | 20140 |
| 1980 | 75930 | 3923 | 3533 | 2335 | 2140 | 1232 | 2292 | 13184 | 14904 | 10962 | 21425 |
| 1981 | 78901 | 4639 | 3815 | 2452 | 2358 | 1465 | 2242 | 13354 | 15114 | 11371 | 22091 |
| 1982 | 79743 | 5242 | 4203 | 2665 | 2552 | 1968 | 2372 | 13882 | 14411 | 11499 | 20949 |
| 1983 | 81445 | 5805 | 4632 | 2826 | 2666 | 2208 | 2369 | 14038 | 14213 | 11721 | 20967 |
| 1984 | 83395 | 6225 | 4893 | 2732 | 2737 | 2374 | 2431 | 14515 | 14515 | 12309 | 20664 |
| 1985 | 84767 | 6483 | 5197 | 2731 | 2970 | 2641 | 2255 | 14663 | 14813 | 12590 | 20424 |
| 1986 | 88184 | 7165 | 5535 | 2818 | 3168 | 2894 | 2272 | 15361 | 14892 | 13117 | 20962 |

PERCENT WOMEN

| Year | Total | Eng | Phys# | Envir | Math* | Comp | Agri | Biol | Health | Psych | Social |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1973 | 19 | 3 | 11 | | 18 | | | | | 36 | 27 |
| 1974 | 24 | 4 | 12 | 12 | 20 | 14 | 11 | 28 | 48 | 39 | 31 |
| 1975 | 25 | 5 | 13 | 14 | 21 | 15 | 13 | 29 | 52 | 42 | 32 |
| 1976 | 27 | 6 | 13 | 16 | 22 | 16 | 16 | 31 | 58 | 43 | 34 |
| 1977 | 29 | 6 | 14 | 17 | 22 | 16 | 19 | 33 | 62 | 45 | 37 |
| 1978 | 31 | 8 | 14 | 19 | 22 | 18 | 21 | 33 | 65 | 48 | 41 |
| 1979 | 33 | 9 | 15 | 21 | 21 | 21 | 23 | 35 | 70 | 49 | 42 |
| 1980 | 34 | 10 | 16 | 23 | 23 | 24 | 24 | 37 | 70 | 53 | 42 |
| 1981 | 34 | 10 | 17 | 23 | 24 | 23 | 23 | 38 | 68 | 53 | 43 |
| 1982 | 34 | 11 | 18 | 25 | 25 | 25 | 25 | 39 | 69 | 54 | 43 |
| 1983 | 33 | 11 | 19 | 25 | 26 | 24 | 25 | 40 | 69 | 55 | 44 |
| 1984 | 34 | 11 | 19 | 24 | 26 | 23 | 26 | 39 | 69 | 57 | 44 |
| 1985 | 34 | 12 | 20 | 25 | 27 | 21 | 26 | 41 | 69 | 58 | 43 |
| 1986 | 34 | 12 | 20 | 26 | 27 | 21 | 26 | 42 | 69 | 60 | 44 |

# Includes environmental sciences in 1973. *Includes computer sciences in 1973.

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall, 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-38

SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND, FALL 1985

| FIELD | TOTAL | U.S. CITIZENS | | | | | | FOREIGN |
|---|---|---|---|---|---|---|---|---|
| | | BLACK NON-HISPANIC | AMERICAN INDIAN/ ALASKAN NATIVE | ASIAN/ PACIFIC ISLANDER | HISPANIC | WHITE NON-HISPANIC | OTHER OR UNKNOWN | |
| TOTAL, ALL FIELDS | 434,836 | 14,531 | 1,040 | 14,300 | 11,511 | 278,333 | 34,167 | 80,954 |
| ENGINEERING | 100,368 | 1,515 | 130 | 5,103 | 1,603 | 52,782 | 9,858 | 29,378 |
| AEROSPACE | 2,648 | 23 | 2 | 81 | 32 | 1,448 | 244 | 818 |
| AGRICULTURAL | 941 | 9 | 1 | 22 | 8 | 497 | 17 | 387 |
| BIOMEDICAL | 1,373 | 18 | 6 | 71 | 22 | 972 | 57 | 227 |
| CHEMICAL | 7,160 | 71 | 8 | 284 | 113 | 3,870 | 403 | 2,411 |
| CIVIL | 15,396 | 206 | 15 | 458 | 291 | 7,587 | 1,443 | 5,396 |
| ELECTRICAL | 28,660 | 473 | 36 | 2,050 | 457 | 13,794 | 3,305 | 8,544 |
| ENGINEERING SCIENCE | 2,257 | 34 | 3 | 80 | 16 | 1,440 | 137 | 548 |
| INDUSTRIAL | 12,655 | 302 | 13 | 404 | 280 | 8,311 | 1,055 | 2,290 |
| MECHANICAL | 14,126 | 166 | 26 | 800 | 185 | 7,146 | 1,082 | 4,722 |
| METALLURGICAL/MATERIALS | 3,915 | 33 | 6 | 202 | 37 | 2,046 | 224 | 1,368 |
| MINING | 489 | 0 | 1 | 9 | 5 | 277 | 51 | 146 |
| NUCLEAR | 1,220 | 15 | 2 | 40 | 15 | 667 | 28 | 453 |
| PETROLEUM | 782 | 9 | 0 | 11 | 9 | 410 | 66 | 277 |
| ENGINEERING, N.E.C. | 8,745 | 155 | 11 | 591 | 133 | 4,318 | 1,747 | 1,789 |
| SCIENCES, TOTAL | 334,468 | 13,016 | 911 | 9,197 | 9,908 | 225,551 | 24,308 | 51,576 |
| PHYSICAL SCIENCES | 31,300 | 555 | 44 | 975 | 604 | 18,565 | 1,589 | 8,969 |
| ASTRONOMY | 671 | 6 | 1 | 6 | 7 | 472 | 25 | 154 |
| CHEMISTRY | 18,592 | 403 | 34 | 698 | 442 | 11,588 | 1,024 | 4,404 |
| PHYSICS | 11,660 | 121 | 9 | 264 | 151 | 6,218 | 514 | 4,384 |
| PHYSICAL SCIENCES, N.E.C. | 377 | 26 | 0 | 7 | 4 | 287 | 27 | 26 |
| ENVIRONMENTAL SCIENCES | 16,008 | 128 | 22 | 192 | 285 | 11,936 | 1,537 | 1,909 |
| ATMOSPHERIC SCIENCES | 964 | 7 | 0 | 25 | 25 | 694 | 4 | 209 |
| GEOSCIENCES | 10,457 | 74 | 16 | 118 | 108 | 7,992 | 1,120 | 1,030 |
| OCEANOGRAPHY | 2,283 | 18 | 2 | 26 | 123 | 1,450 | 320 | 344 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 2,304 | 29 | 4 | 23 | 29 | 1,800 | 93 | 326 |
| MATHEMATICAL SCIENCES | 18,123 | 423 | 27 | 692 | 267 | 9,875 | 1,401 | 5,438 |
| COMPUTER SCIENCES | 29,426 | 579 | 55 | 1,918 | 388 | 15,067 | 4,277 | 7,144 |
| LIFE SCIENCES | 107,262 | 3,630 | 277 | 2,888 | 3,082 | 79,263 | 5,170 | 12,952 |
| AGRICULTURAL SCIENCES | 11,474 | 168 | 20 | 182 | 403 | 7,724 | 397 | 2,580 |
| BIOLOGICAL SCIENCES | 47,878 | 1,252 | 109 | 1,613 | 990 | 34,994 | 1,834 | 7,086 |
| ANATOMY | 1,005 | 24 | 3 | 29 | 22 | 773 | 61 | 93 |
| BIOCHEMISTRY | 4,672 | 52 | 12 | 206 | 79 | 3,259 | 75 | 989 |
| BIOLOGY | 13,733 | 594 | 38 | 476 | 419 | 10,108 | 704 | 1,393 |
| BIOMETRY/EPIDEMIOLOGY | 1,360 | 60 | 8 | 50 | 28 | 986 | 30 | 199 |
| BIOPHYSICS | 428 | 4 | 0 | 17 | 3 | 301 | 5 | 98 |
| BOTANY | 3,353 | 39 | 4 | 82 | 37 | 2,438 | 65 | 690 |
| CELL BIOLOGY | 1,495 | 17 | 1 | 77 | 16 | 1,093 | 91 | 200 |
| ECOLOGY | 1,037 | 13 | 1 | 10 | 13 | 875 | 10 | 115 |
| ENTOMOLOGY/PARASITOLOGY | 1,346 | 21 | 0 | 20 | 16 | 1,006 | 25 | 258 |
| GENETICS | 1,075 | 20 | 2 | 34 | 20 | 820 | 10 | 149 |
| MICROBIOLOGY | 4,487 | 68 | 10 | 157 | 107 | 3,291 | 119 | 735 |
| NUTRITION | 4,520 | 126 | 10 | 132 | 65 | 2,926 | 214 | 1,046 |
| PATHOLOGY | 1,372 | 21 | 3 | 55 | 21 | 982 | 80 | 210 |
| PHARMACOLOGY | 2,107 | 38 | 3 | 98 | 36 | 1,612 | 66 | 264 |
| PHYSIOLOGY | 2,213 | 58 | 8 | 79 | 51 | 1,696 | 50 | 271 |
| ZOOLOGY | 2,231 | 48 | 6 | 31 | 31 | 1,816 | 97 | 200 |
| BIOSCIENCES, N.E.C. | 1,446 | 50 | 0 | 41 | 26 | 1,011 | 133 | 186 |
| HEALTH SCIENCES | 47,910 | 2,210 | 148 | 1,092 | 1,689 | 36,545 | 2,940 | 3,286 |
| DENTISTRY | 835 | 15 | 2 | 26 | 16 | 577 | 37 | 162 |
| NEUROLOGY | 337 | 1 | 0 | 14 | 4 | 271 | 13 | 34 |
| NURSING | 18,440 | 865 | 49 | 318 | 627 | 15,406 | 842 | 333 |
| PHARMACEUTICAL SCIENCES | 2,553 | 52 | 4 | 102 | 30 | 1,457 | 169 | 739 |
| PREVENTIVE MEDICINE/ COMMUNITY HEALTH | 6,983 | 376 | 29 | 246 | 364 | 4,422 | 581 | 965 |
| SPEECH PATHOLOGY/AUDIOLOGY | 8,122 | 406 | 23 | 117 | 280 | 6,285 | 696 | 306 |
| VETERINARY SCIENCES | 640 | 23 | 1 | 9 | 6 | 441 | 20 | 140 |
| CLINICAL MEDICINE, N.E.C. | 1,644 | 41 | 2 | 51 | 43 | 1,170 | 114 | 221 |
| HEALTH RELATED, N.E.C. | 8,366 | 431 | 39 | 210 | 316 | 6,515 | 467 | 386 |
| PSYCHOLOGY | 44,328 | 2,100 | 156 | 693 | 1,782 | 34,465 | 3,533 | 1,600 |
| SOCIAL SCIENCES | 88,020 | 5,601 | 330 | 1,840 | 3,500 | 56,381 | 6,802 | 13,565 |
| AGRICULTURAL ECONOMICS | 2,254 | 54 | 4 | 12 | 36 | 1,278 | 33 | 837 |
| ANTHROPOLOGY | 5,617 | 95 | 21 | 54 | 153 | 4,540 | 219 | 535 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 12,712 | 321 | 9 | 355 | 266 | 6,143 | 1,088 | 4,530 |
| GEOGRAPHY | 2,957 | 58 | 4 | 36 | 33 | 2,281 | 141 | 404 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 314 | 3 | 0 | 3 | 2 | 245 | 0 | 61 |
| LINGUISTICS | 3,082 | 119 | 8 | 47 | 81 | 1,654 | 68 | 1,105 |
| POLITICAL SCIENCE | 27,456 | 2,326 | 106 | 644 | 1,573 | 16,531 | 3,245 | 3,032 |
| SOCIOLOGY | 6,637 | 470 | 34 | 142 | 207 | 4,098 | 258 | 1,428 |
| SOCIOLOGY/ANTHROPOLOGY | 1,063 | 122 | 2 | 27 | 35 | 658 | 40 | 165 |
| SOCIAL SCIENCES, N.E.C. | 25,927 | 2,033 | 142 | 526 | 1,115 | 18,953 | 1,690 | 1,468 |

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall, 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-39

FULL TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE GRANTING INSTITUTIONS BY FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND, FALL 1985

| FIELD | TOTAL | U.S. CITIZENS | | | | | | FOREIGN |
|---|---|---|---|---|---|---|---|---|
| | | BLACK NON-HISPANIC | AMERICAN INDIAN/ ALASKAN NATIVE | ASIAN/ PACIFIC ISLANDER | HISPANIC | WHITE NON-HISPANIC | OTHER OR UNKNOWN | |
| TOTAL, ALL FIELDS | 249,666 | 5,866 | 584 | 7,533 | 6,049 | 152,298 | 11,227 | 66,109 |
| ENGINEERING | 55,997 | 662 | 66 | 2,483 | 729 | 24,974 | 3,355 | 23,728 |
| AEROSPACE | 1,987 | 20 | 1 | 36 | 20 | 962 | 213 | 735 |
| AGRICULTURAL | 767 | 8 | 1 | 13 | 4 | 379 | 9 | 353 |
| BIOMEDICAL | 1,117 | 18 | 6 | 61 | 18 | 808 | 13 | 193 |
| CHEMICAL | 5,519 | 51 | 6 | 195 | 69 | 2,810 | 186 | 2,202 |
| CIVIL | 10,000 | 112 | 9 | 270 | 148 | 4,520 | 467 | 4,474 |
| ELECTRICAL | 14,423 | 209 | 14 | 910 | 209 | 5,692 | 944 | 6,445 |
| ENGINEERING SCIENCE | 1,305 | 9 | 2 | 31 | 7 | 656 | 123 | 477 |
| INDUSTRIAL | 4,248 | 69 | 7 | 137 | 86 | 2,025 | 201 | 1,723 |
| MECHANICAL | 8,566 | 75 | 9 | 436 | 91 | 3,346 | 742 | 3,867 |
| METALLURGICAL/MATERIALS | 3,064 | 25 | 5 | 162 | 28 | 1,413 | 156 | 1,275 |
| MINING | 371 | 0 | 1 | 7 | 3 | 192 | 34 | 134 |
| NUCLEAR | 1,030 | 13 | 1 | 36 | 11 | 511 | 28 | 430 |
| PETROLEUM | 951 | 5 | 0 | 10 | 4 | 257 | 35 | 240 |
| ENGINEERING, N.E.C. | 3,049 | 48 | 4 | 179 | 31 | 1,403 | 204 | 1,180 |
| SCIENCES, TOTAL | 193,669 | 5,204 | 518 | 5,050 | 5,320 | 127,324 | 7,872 | 42,381 |
| PHYSICAL SCIENCES | 26,065 | 308 | 32 | 744 | 514 | 14,982 | 1,192 | 8,293 |
| ASTRONOMY | 635 | 5 | 1 | 6 | 7 | 441 | 25 | 150 |
| CHEMISTRY | 15,186 | 218 | 23 | 511 | 383 | 9,271 | 789 | 3,991 |
| PHYSICS | 10,111 | 81 | 8 | 224 | 122 | 5,171 | 369 | 4,136 |
| PHYSICAL SCIENCES, N.E.C. | 133 | 4 | 0 | 3 | 2 | 99 | 9 | 16 |
| ENVIRONMENTAL SCIENCES | 10,918 | 82 | 18 | 147 | 174 | 8,094 | 762 | 1,641 |
| ATMOSPHERIC SCIENCES | 867 | 6 | 0 | 21 | 25 | 616 | 4 | 195 |
| GEOSCIENCES | 7,381 | 48 | 12 | 88 | 77 | 5,541 | 698 | 917 |
| OCEANOGRAPHY | 1,524 | 13 | 2 | 21 | 61 | 1,057 | 58 | 312 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 1,146 | 15 | 4 | 17 | 11 | 880 | 2 | 217 |
| MATHEMATICAL SCIENCES | 11,180 | 162 | 4 | 352 | 161 | 5,329 | 512 | 4,660 |
| COMPUTER SCIENCES | 12,401 | 155 | 44 | 596 | 107 | 5,522 | 1,115 | 4,862 |
| LIFE SCIENCES | 66,235 | 1,471 | 173 | 1,852 | 1,912 | 47,783 | 2,031 | 11,013 |
| AGRICULTURAL SCIENCES | 8,723 | 104 | 11 | 106 | 253 | 5,778 | 209 | 2,262 |
| BIOLOGICAL SCIENCES | 36,165 | 630 | 85 | 1,218 | 724 | 26,415 | 836 | 6,257 |
| ANATOMY | 903 | 23 | 3 | 27 | 20 | 699 | 39 | 92 |
| BIOCHEMISTRY | 4,488 | 51 | 11 | 201 | 73 | 3,121 | 58 | 973 |
| BIOLOGY | 7,430 | 141 | 29 | 210 | 246 | 5,613 | 171 | 1,020 |
| BIOMETRY/EPIDEMIOLOGY | 996 | 48 | 5 | 41 | 20 | 680 | 29 | 173 |
| BIOPHYSICS | 407 | 4 | 0 | 16 | 2 | 285 | 5 | 95 |
| BOTANY | 2,840 | 30 | 4 | 75 | 34 | 2,023 | 47 | 627 |
| CELL BIOLOGY | 1,472 | 17 | 1 | 77 | 16 | 1,074 | 90 | 197 |
| ECOLOGY | 864 | 7 | 1 | 10 | 10 | 733 | 3 | 100 |
| ENTOMOLOGY/PARASITOLOGY | 1,155 | 18 | 0 | 13 | 14 | 862 | 12 | 236 |
| GENETICS | 1,014 | 20 | 2 | 32 | 19 | 768 | 10 | 163 |
| MICROBIOLOGY | 3,884 | 60 | 6 | 137 | 96 | 2,862 | 77 | 646 |
| NUTRITION | 2,946 | 50 | 4 | 94 | 42 | 1,804 | 52 | 900 |
| PATHOLOGY | 1,047 | 13 | 2 | 50 | 18 | 759 | 15 | 190 |
| PHARMACOLOGY | 1,996 | 34 | 3 | 94 | 35 | 1,532 | 48 | 250 |
| PHYSIOLOGY | 1,998 | 50 | 8 | 75 | 40 | 1,521 | 39 | 265 |
| ZOOLOGY | 1,759 | 34 | 6 | 21 | 27 | 1,409 | 77 | 185 |
| BIOSCIENCES, N.E.C. | 966 | 30 | 0 | 45 | 12 | 670 | 64 | 145 |
| HEALTH SCIENCES | 21,347 | 737 | 77 | 528 | 935 | 15,590 | 986 | 2,494 |
| DENTISTRY | 745 | 14 | 1 | 26 | 13 | 499 | 37 | 155 |
| NEUROLOGY | 322 | 1 | 0 | 14 | 4 | 269 | 0 | 34 |
| NURSING | 5,453 | 216 | 18 | 76 | 281 | 4,460 | 251 | 151 |
| PHARMACEUTICAL SCIENCES | 1,808 | 32 | 2 | 58 | 21 | 957 | 78 | 660 |
| PREVENTIVE MEDICINE/ COMMUNITY HEALTH | 3,876 | 155 | 26 | 160 | 247 | 2,290 | 241 | 757 |
| SPEECH PATHOLOGY/AUDIOLOGY | 4,583 | 159 | 13 | 71 | 141 | 3,823 | 170 | 206 |
| VETERINARY SCIENCES | 488 | 7 | 0 | 6 | 4 | 341 | 6 | 124 |
| CLINICAL MEDICINE, N.E.C. | 1,117 | 19 | 1 | 38 | 27 | 758 | 96 | 178 |
| HEALTH RELATED, N.E.C. | 2,955 | 134 | 16 | 79 | 197 | 2,193 | 107 | 229 |
| PSYCHOLOGY | 21,002 | 812 | 68 | 338 | 915 | 16,844 | 997 | 1,028 |
| SOCIAL SCIENCES | 45,868 | 2,214 | 179 | 1,021 | 1,537 | 28,770 | 1,263 | 10,884 |
| AGRICULTURAL ECONOMICS | 1,944 | 37 | 3 | 10 | 30 | 1,101 | 24 | 739 |
| ANTHROPOLOGY | 3,814 | 68 | 16 | 40 | 102 | 3,085 | 57 | 446 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 8,612 | 158 | 5 | 230 | 143 | 3,931 | 386 | 3,759 |
| GEOGRAPHY | 2,000 | 29 | 3 | 26 | 26 | 1,502 | 53 | 361 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 265 | 2 | 0 | 3 | 2 | 201 | 0 | 57 |
| LINGUISTICS | 2,321 | 74 | 7 | 38 | 43 | 1,214 | 33 | 912 |
| POLITICAL SCIENCE | 10,609 | 654 | 40 | 307 | 497 | 6,406 | 442 | 2,263 |
| SOCIOLOGY | 4,396 | 237 | 24 | 93 | 123 | 2,677 | 76 | 1,166 |
| SOCIOLOGY/ANTHROPOLOGY | 534 | 57 | 1 | 8 | 20 | 318 | 2 | 128 |
| SOCIAL SCIENCES, N.E.C. | 11,373 | 898 | 80 | 266 | 551 | 8,335 | 190 | 1,053 |

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall, 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-40

FULL TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD, CITIZENSHIP AND RACE/ETHNICITY, 1980, 1982-85

| FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND | FULL TIME | | | | |
|---|---|---|---|---|---|
| | 1980 | 1982 | 1983 | 1984 | 1985 |
| TOTAL, ALL FIELDS: | 249,159 | 255,297 | 263,750 | 267,451 | 269,319 |
| TOTAL US CITIZENS | 198,429 | 197,374 | 200,966 | 203,167 | 200,490 |
| BLACK, NON-HISPANIC | 6,607 | 7,226 | 7,474 | 7,618 | 7,176 |
| AMERICAN INDIAN/ALASKAN NATIVE | 661 | 712 | 774 | 740 | 661 |
| ASIAN/PACIFIC ISLANDER | 5,394 | 5,657 | 6,460 | 7,456 | 8,477 |
| HISPANIC | 4,922 | 5,496 | 6,486 | 6,857 | 6,725 |
| WHITE, NON-HISPANIC | 149,481 | 159,171 | 168,096 | 166,580 | 162,447 |
| OTHER OR UNKNOWN | 31,364 | 19,113 | 11,676 | 13,916 | 15,003 |
| FOREIGN | 50,730 | 57,923 | 62,784 | 64,284 | 68,829 |
| ENGINEERING: | 43,107 | 50,239 | 55,193 | 56,581 | 57,524 |
| TOTAL US CITIZENS | 25,108 | 28,816 | 32,147 | 33,023 | 33,129 |
| BLACK, NON-HISPANIC | 472 | 519 | 666 | 710 | 725 |
| AMERICAN INDIAN/ALASKAN NATIVE | 26 | 76 | 101 | 122 | 76 |
| ASIAN/PACIFIC ISLANDER | 1,506 | 1,419 | 1,759 | 2,210 | 2,626 |
| HISPANIC | 572 | 601 | 785 | 776 | 784 |
| WHITE, NON-HISPANIC | 18,603 | 21,677 | 25,196 | 25,635 | 25,405 |
| OTHER OR UNKNOWN | 3,929 | 4,524 | 3,640 | 3,571 | 3,514 |
| FOREIGN | 17,999 | 21,423 | 23,046 | 23,558 | 24,395 |
| SCIENCES, TOTAL: | 206,052 | 205,058 | 208,557 | 210,869 | 211,796 |
| TOTAL US CITIZENS | 173,321 | 168,558 | 168,819 | 170,144 | 167,362 |
| BLACK, NON-HISPANIC | 6,135 | 6,706 | 6,808 | 6,908 | 6,450 |
| AMERICAN INDIAN/ALASKAN NATIVE | 635 | 636 | 673 | 618 | 587 |
| ASIAN/PACIFIC ISLANDER | 3,888 | 4,238 | 4,701 | 5,246 | 5,851 |
| HISPANIC | 4,350 | 4,896 | 5,701 | 6,082 | 6,942 |
| WHITE, NON-HISPANIC | 130,676 | 137,494 | 142,900 | 140,945 | 137,042 |
| OTHER OR UNKNOWN | 27,435 | 14,588 | 8,036 | 10,345 | 11,489 |
| FOREIGN | 32,731 | 36,500 | 39,738 | 40,726 | 44,434 |
| PHYSICAL SCIENCES: | 22,918 | 24,040 | 25,213 | 25,874 | 26,720 |
| TOTAL US CITIZENS | 17,174 | 17,566 | 17,981 | 18,333 | 18,222 |
| BLACK, NON-HISPANIC | 323 | 418 | 412 | 438 | 392 |
| AMERICAN INDIAN/ALASKAN NATIVE | 13 | 22 | 40 | 66 | 34 |
| ASIAN/PACIFIC ISLANDER | 513 | 532 | 590 | 751 | 791 |
| HISPANIC | 305 | 367 | 449 | 461 | 526 |
| WHITE, NON-HISPANIC | 13,919 | 14,742 | 15,478 | 15,311 | 15,242 |
| OTHER OR UNKNOWN | 2,101 | 1,444 | 1,012 | 1,305 | 1,237 |
| FOREIGN | 5,744 | 6,485 | 7,232 | 7,541 | 8,498 |
| ENVIRONMENTAL SCIENCES: | 10,969 | 11,436 | 12,089 | 11,714 | 11,557 |
| TOTAL US CITIZENS | 9,570 | 9,789 | 10,391 | 10,151 | 9,862 |
| BLACK, NON-HISPANIC | 66 | 76 | 83 | 86 | 85 |
| AMERICAN INDIAN/ALASKAN NATIVE | 38 | 17 | 24 | 18 | 18 |
| ASIAN/PACIFIC ISLANDER | 143 | 136 | 158 | 148 | 157 |
| HISPANIC | 115 | 132 | 146 | 197 | 209 |
| WHITE, NON-HISPANIC | 7,523 | 8,388 | 9,348 | 8,701 | 8,471 |
| OTHER OR UNKNOWN | 1,685 | 1,040 | 632 | 1,001 | 922 |
| FOREIGN | 1,399 | 1,647 | 1,698 | 1,564 | 1,695 |
| MATHEMATICAL SCIENCES: | 9,902 | 10,823 | 10,971 | 11,432 | 11,975 |
| TOTAL US CITIZENS | 6,648 | 6,935 | 6,726 | 6,879 | 7,083 |
| BLACK, NON-HISPANIC | 141 | 174 | 164 | 185 | 199 |
| AMERICAN INDIAN/ALASKAN NATIVE | 28 | 20 | 12 | 4 | 6 |
| ASIAN/PACIFIC ISLANDER | 205 | 298 | 337 | 322 | 435 |
| HISPANIC | 140 | 174 | 206 | 185 | 163 |
| WHITE, NON-HISPANIC | 5,042 | 5,671 | 5,589 | 5,562 | 5,679 |
| OTHER OR UNKNOWN | 1,092 | 698 | 419 | 620 | 601 |
| FOREIGN | 3,254 | 3,888 | 4,245 | 4,553 | 4,892 |
| COMPUTER SCIENCES: | 6,587 | 9,171 | 10,687 | 11,328 | 14,076 |
| TOTAL US CITIZENS | 4,521 | 5,981 | 6,724 | 6,905 | 8,716 |
| BLACK, NON-HISPANIC | 67 | 198 | 207 | 193 | 192 |
| AMERICAN INDIAN/ALASKAN NATIVE | 7 | 15 | 11 | 38 | 46 |
| ASIAN/PACIFIC ISLANDER | 200 | 365 | 556 | 534 | 885 |
| HISPANIC | 72 | 105 | 105 | 111 | 144 |
| WHITE, NON-HISPANIC | 2,793 | 4,339 | 5,053 | 5,209 | 5,865 |
| OTHER OR UNKNOWN | 1,412 | 959 | 792 | 821 | 1,584 |
| FOREIGN | 2,066 | 3,190 | 3,963 | 4,423 | 5,362 |

| FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND | FULL TIME | | | | |
|---|---|---|---|---|---|
| | 1980 | 1982 | 1983 | 1984 | 1985 |
| LIFE SCIENCES, TOTAL: | 67,711 | 65,653 | 65,141 | 66,168 | 66,235 |
| TOTAL US CITIZENS | 59,226 | 56,343 | 55,182 | 56,025 | 55,222 |
| BLACK, NON-HISPANIC | 1,346 | 1,399 | 1,347 | 1,377 | 1,471 |
| AMERICAN INDIAN/ALASKAN NATIVE | 163 | 170 | 141 | 155 | 173 |
| ASIAN/PACIFIC ISLANDER | 1,545 | 1,559 | 1,604 | 1,795 | 1,852 |
| HISPANIC | 1,357 | 1,236 | 1,604 | 1,658 | 1,912 |
| WHITE, NON-HISPANIC | 48,155 | 48,644 | 48,911 | 49,527 | 47,783 |
| OTHER OR UNKNOWN | 6,660 | 3,335 | 1,505 | 1,553 | 2,031 |
| FOREIGN | 8,485 | 9,310 | 9,959 | 10,143 | 11,013 |
| AGRICULTURAL SCIENCES: | 9,591 | 9,500 | 9,397 | 9,327 | 8,723 |
| TOTAL US CITIZENS | 7,432 | 7,219 | 7,023 | 7,023 | 6,461 |
| BLACK, NON-HISPANIC | 84 | 104 | 99 | 88 | 104 |
| AMERICAN INDIAN/ALASKAN NATIVE | 18 | 11 | 19 | 17 | 11 |
| ASIAN/PACIFIC ISLANDER | 123 | 112 | 103 | 116 | 106 |
| HISPANIC | 208 | 147 | 163 | 184 | 253 |
| WHITE, NON-HISPANIC | 6,136 | 6,363 | 6,422 | 6,535 | 5,778 |
| OTHER OR UNKNOWN | 863 | 482 | 211 | 83 | 209 |
| FOREIGN | 2,159 | 2,281 | 2,374 | 2,304 | 2,262 |
| BIOLOGICAL SCIENCES: | 35,817 | 35,226 | 35,187 | 35,953 | 36,165 |
| TOTAL US CITIZENS | 31,471 | 30,355 | 29,854 | 30,321 | 29,908 |
| BLACK, NON-HISPANIC | 551 | 632 | 628 | 609 | 630 |
| AMERICAN INDIAN/ALASKAN NATIVE | 48 | 69 | 78 | 63 | 85 |
| ASIAN/PACIFIC ISLANDER | 885 | 877 | 979 | 1,086 | 1,218 |
| HISPANIC | 579 | 579 | 635 | 641 | 724 |
| WHITE, NON-HISPANIC | 25,952 | 25,521 | 26,751 | 27,197 | 26,415 |
| OTHER OR UNKNOWN | 3,456 | 1,687 | 783 | 725 | 836 |
| FOREIGN | 4,346 | 4,871 | 5,333 | 5,632 | 6,257 |
| HEALTH SCIENCES: | 22,303 | 20,927 | 20,557 | 20,888 | 21,347 |
| TOTAL US CITIZENS | 20,323 | 18,769 | 18,305 | 18,681 | 18,853 |
| BLACK, NON-HISPANIC | 711 | 663 | 640 | 680 | 737 |
| AMERICAN INDIAN/ALASKAN NATIVE | 97 | 100 | 94 | 75 | 77 |
| ASIAN/PACIFIC ISLANDER | 537 | 570 | 522 | 553 | 528 |
| HISPANIC | 570 | 510 | 806 | 833 | 935 |
| WHITE, NON-HISPANIC | 16,067 | 15,760 | 15,732 | 15,796 | 15,590 |
| OTHER OR UNKNOWN | 2,341 | 1,166 | 511 | 746 | 986 |
| FOREIGN | 1,980 | 2,158 | 2,252 | 2,207 | 2,494 |
| PSYCHOLOGY: | 21,580 | 21,103 | 21,319 | 21,592 | 21,002 |
| TOTAL US CITIZENS | 20,526 | 20,216 | 20,413 | 20,672 | 19,974 |
| BLACK, NON-HISPANIC | 830 | 802 | 862 | 861 | 812 |
| AMERICAN INDIAN/ALASKAN NATIVE | 144 | 56 | 63 | 60 | 68 |
| ASIAN/PACIFIC ISLANDER | 247 | 274 | 289 | 319 | 338 |
| HISPANIC | 866 | 936 | 897 | 937 | 915 |
| WHITE, NON-HISPANIC | 14,764 | 15,574 | 17,321 | 17,243 | 16,844 |
| OTHER OR UNKNOWN | 3,695 | 2,574 | 981 | 1,252 | 997 |
| FOREIGN | 1,054 | 887 | 906 | 920 | 1,028 |
| SOCIAL SCIENCES: | 51,518 | 49,211 | 48,080 | 47,186 | 45,868 |
| TOTAL US CITIZENS | 41,835 | 39,306 | 37,747 | 37,092 | 34,984 |
| BLACK, NON-HISPANIC | 2,523 | 2,658 | 2,507 | 2,323 | 2,214 |
| AMERICAN INDIAN/ALASKAN NATIVE | 166 | 254 | 225 | 188 | 179 |
| ASIAN/PACIFIC ISLANDER | 828 | 880 | 904 | 982 | 1,021 |
| HISPANIC | 1,216 | 1,546 | 1,647 | 1,624 | 1,537 |
| WHITE, NON-HISPANIC | 31,366 | 31,282 | 31,059 | 30,071 | 28,770 |
| OTHER OR UNKNOWN | 5,734 | 2,686 | 1,405 | 1,904 | 1,263 |
| FOREIGN | 9,683 | 9,905 | 10,333 | 10,094 | 10,884 |

SOURCE: Selected data from Academic Science/Engineering: Graduate Enrollment and Support, Fall, 1985, National Science Foundation, October 1986, unpublished

## TABLE 1-41

FOREIGN FULL-TIME SCIENCE/ENGINEERING GRADUTE STUDENTS IN ALL INSTITUTIONS BY FIELD, 1979-1985

| FIELD | NUMBER | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
| TOTAL, ALL FIELDS | 46,887 | 50,730 | 54,979 | 57,923 | 62,784 | 64,284 | 68,829 |
| ENGINEERING | 16,660 | 17,999 | 19,814 | 21,423 | 23,046 | 23,558 | 24,395 |
| AEROSPACE | 521 | 568 | 601 | 577 | 752 | 736 | 737 |
| AGRICULTURAL | 274 | 293 | 298 | 341 | 341 | 327 | 353 |
| BIOMEDICAL | 131 | 135 | 158 | 199 | 195 | 220 | 194 |
| CHEMICAL | 1,864 | 1,990 | 2,202 | 2,341 | 2,239 | 2,133 | 2,214 |
| CIVIL | 3,145 | 3,375 | 3,740 | 4,050 | 4,388 | 4,488 | 4,530 |
| ELECTRICAL | 3,865 | 4,297 | 4,785 | 5,112 | 5,840 | 6,050 | 6,711 |
| ENGINEERING SCIENCE | 307 | 363 | 372 | 440 | 497 | 484 | 480 |
| INDUSTRIAL | 1,414 | 1,456 | 1,595 | 1,626 | 1,522 | 1,695 | 1,834 |
| MECHANICAL | 2,429 | 2,630 | 3,059 | 3,500 | 4,003 | 4,056 | 3,951 |
| METALLURGICAL/MATERIALS | 1,025 | 1,107 | 1,112 | 1,181 | 1,174 | 1,209 | 1,287 |
| MINING | 113 | 139 | 155 | 122 | 155 | 141 | 135 |
| NUCLEAR | 444 | 443 | 427 | 473 | 461 | 412 | 430 |
| PETROLEUM | 232 | 213 | 195 | 260 | 290 | 287 | 250 |
| ENGINEERING, N.E.C. | 896 | 990 | 1,115 | 1,201 | 1,189 | 1,320 | 1,291 |
| SCIENCES, TOTAL | 30,227 | 32,731 | 35,165 | 36,500 | 39,738 | 40,726 | 44,434 |
| PHYSICAL SCIENCES | 5,347 | 5,744 | 6,271 | 6,485 | 7,232 | 7,541 | 8,498 |
| ASTRONOMY | 81 | 84 | 93 | 102 | 105 | 117 | 150 |
| CHEMISTRY | 2,859 | 2,983 | 3,217 | 3,216 | 3,525 | 3,579 | 4,118 |
| PHYSICS | 2,393 | 2,665 | 2,950 | 3,157 | 3,584 | 3,824 | 4,204 |
| PHYSICAL SCIENCES, N.E.C. | 14 | 12 | 11 | 10 | 18 | 21 | 25 |
| ENVIRONMENTAL SCIENCES | 1,322 | 1,399 | 1,504 | 1,647 | 1,698 | 1,564 | 1,695 |
| ATMOSPHERIC SCIENCES | 149 | 144 | 179 | 187 | 182 | 164 | 196 |
| GEOSCIENCES | 755 | 816 | 885 | 913 | 923 | 863 | 948 |
| OCEANOGRAPHY | 185 | 208 | 246 | 340 | 377 | 297 | 312 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 233 | 231 | 194 | 207 | 216 | 240 | 239 |
| MATHEMATICAL SCIENCES | 2,896 | 3,254 | 3,641 | 3,888 | 4,245 | 4,553 | 4,892 |
| COMPUTER SCIENCES | 1,771 | 2,066 | 2,558 | 3,190 | 3,963 | 4,423 | 5,362 |
| LIFE SCIENCES | 8,621 | 8,866 | 9,381 | 9,732 | 10,421 | 10,753 | 11,401 |
| AGRICULTURAL SCIENCES | 2,141 | 2,226 | 2,375 | 2,383 | 2,468 | 2,445 | 2,314 |
| BIOLOGICAL SCIENCES | 4,440 | 4,588 | 4,852 | 5,039 | 5,524 | 5,878 | 6,466 |
| ANATOMY | 82 | 83 | 86 | 88 | 74 | 59 | 92 |
| BIOCHEMISTRY | 443 | 509 | 594 | 658 | 775 | 843 | 976 |
| BIOLOGY | 849 | 868 | 883 | 851 | 994 | 1,163 | 1,156 |
| BIOMETRY/EPIDEMIOLOGY | 130 | 144 | 160 | 150 | 157 | 123 | 173 |
| BIOPHYSICS | 72 | 56 | 61 | 70 | 80 | 80 | 95 |
| BOTANY | 525 | 535 | 539 | 595 | 612 | 623 | 633 |
| CELL BIOLOGY | 65 | 67 | 82 | 103 | 128 | 143 | 197 |
| ECOLOGY | 53 | 67 | 73 | 80 | 78 | 87 | 100 |
| ENTOMOLOGY/PARASITOLOGY | 225 | 227 | 263 | 227 | 240 | 224 | 236 |
| GENETICS | 94 | 96 | 92 | 114 | 145 | 131 | 163 |
| MICROBIOLOGY | 391 | 418 | 418 | 435 | 512 | 554 | 650 |
| NUTRITION | 777 | 781 | 834 | 841 | 821 | 898 | 949 |
| PATHOLOGY | 149 | 163 | 184 | 174 | 206 | 169 | 190 |
| PHARMACOLOGY | 195 | 186 | 199 | 243 | 235 | 241 | 250 |
| PHYSIOLOGY | 178 | 171 | 180 | 188 | 212 | 255 | 265 |
| ZOOLOGY | 137 | 136 | 130 | 131 | 142 | 144 | 185 |
| BIOSCIENCES, N.E.C. | 75 | 79 | 74 | 91 | 113 | 142 | 156 |
| HEALTH SCIENCES | 2,040 | 2,052 | 2,154 | 2,310 | 2,429 | 2,430 | 2,621 |
| DENTISTRY | 211 | 223 | 173 | 129 | 122 | 130 | 155 |
| NEUROLOGY | 13 | 15 | 15 | 14 | 27 | 29 | 34 |
| NURSING | 186 | 181 | 225 | 202 | 159 | 178 | 171 |
| PHARMACEUTICAL SCIENCES | 479 | 463 | 539 | 587 | 629 | 645 | 667 |
| PREVENTIVE MEDICINE, COMMUNITY HEALTH | 508 | 584 | 580 | 695 | 672 | 638 | 783 |
| SPEECH PATHOLOGY/AUDIOLOGY | 230 | 209 | 224 | 213 | 259 | 206 | 223 |
| VETERINARY SCIENCES | 129 | 113 | 118 | 93 | 111 | 110 | 133 |
| CLINICAL MEDICINE, N.E.C. | 105 | 106 | 116 | 150 | 168 | 121 | 193 |
| HEALTH RELATED, N.E.C. | 179 | 158 | 164 | 227 | 282 | 373 | 262 |
| PSYCHOLOGY | 1,148 | 1,210 | 1,004 | 1,079 | 1,092 | 1,084 | 1,230 |
| SOCIAL SCIENCES | 9,122 | 10,192 | 10,806 | 10,479 | 11,057 | 10,809 | 11,367 |
| AGRICULTURAL ECONOMICS | 667 | 754 | 770 | 702 | 765 | 764 | 766 |
| ANTHROPOLOGY | 334 | 396 | 426 | 386 | 402 | 378 | 448 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 3,128 | 3,499 | 3,674 | 3,554 | 3,560 | 3,485 | 3,926 |
| GEOGRAPHY | 343 | 383 | 370 | 391 | 386 | 374 | 367 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 30 | 25 | 30 | 35 | 40 | 38 | 57 |
| LINGUISTICS | 617 | 743 | 753 | 710 | 850 | 838 | 920 |
| POLITICAL SCIENCE | 2,109 | 2,356 | 2,509 | 2,519 | 2,751 | 2,518 | 2,401 |
| SOCIOLOGY | 828 | 924 | 1,044 | 985 | 1,101 | 1,061 | 1,209 |
| SOCIOLOGY/ANTHROPOLOGY | 111 | 103 | 101 | 134 | 129 | 123 | 128 |
| SOCIAL SCIENCES, N.E.C. | 955 | 1,009 | 1,127 | 1,063 | 1,103 | 1,230 | 1,135 |

SOURCE: Open Doors, 1985/86, Institute of International Education

## TABLE 1-42

FOREIGN STUDENTS BY FIELD AND SUBFIELD OF STUDY AND PERCENTAGE CHANGE 1983-84 - 1985-86

| Field of Study | 1983/84 | | | 1984/85 | | | 1985/86 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Foreign Students | % of Year Total | % Change | Foreign Students | % of Year Total | % Change | Foreign Students | % of Year Total | % Change |
| **Agriculture** | 8,260 | 2.4 | (3.3) | 7,540 | 2.2 | (8.7) | 7,400 | 2.1 | (1.9) |
| Agribusiness and Agricultural Production | 1,910 | 0.6 | (17.7) | 2,060 | 0.6 | 7.9 | 2,100 | 0.6 | 1.9 |
| Agricultural Sciences | 5,540 | 1.6 | (0.4) | 4,680 | 1.4 | (15.5) | 4,490 | 1.3 | (4.1) |
| Renewable Natural Resources | 810 | 0.2 | 22.7 | 800 | 0.2 | (1.2) | 810 | 0.2 | 1.3 |
| **Business and Management** | 63,000 | 18.6 | 3.3 | 64,930 | 19.0 | 3.1 | 64,970 | 18.9 | 0.1 |
| Business and Management | 56,350 | 16.6 | 4.1 | 58,180 | 17.0 | 3.2 | 58,230 | 16.9 | 0.1 |
| Business and Office | 3,760 | 1.1 | (5.1) | 3,520 | 1.0 | (6.4) | 3,330 | 1.0 | (5.4) |
| Consumer, Personal, and Misc. Services | 220 | 0.1 | (29.0) | 290 | 0.1 | 31.8 | 230 | 0.1 | (20.7) |
| Marketing and Distribution | 2,670 | 0.8 | 4.3 | 2,940 | 0.9 | 10.1 | 3,180 | 0.9 | 8.2 |
| **Education** | 12,360 | 3.6 | 0.8 | 12,140 | 3.6 | (1.8) | 11,680 | 3.4 | (3.8) |
| **Engineering** | 78,160 | 23.1 | 0.2 | 75,370 | 22.0 | (3.6) | 74,580 | 21.7 | (1.0) |
| Engineering | 65,450 | 19.3 | 1.0 | 64,880 | 19.0 | (0.9) | 64,520 | 18.8 | (0.6) |
| Engineering-Related Technologies | 11,100 | 3.3 | (2.5) | 9,340 | 2.7 | (15.9) | 9,010 | 2.6 | (3.5) |
| Construction Trades | 280 | 0.1 | (36.4) | 200 | — | (28.6) | 220 | 0.1 | 10.0 |
| Mechanics and Repairers | 800 | 0.2 | 2.6 | 530 | 0.2 | (33.8) | 470 | 0.1 | (11.3) |
| Precision Production | 190 | 0.1 | 58.3 | 160 | — | (15.8) | 140 | — | (12.5) |
| Transportation and Material Moving | 340 | 0.1 | (27.7) | 260 | 0.1 | (23.5) | 220 | 0.1 | (15.4) |
| **Fine and Applied Arts** | 15,170 | 4.5 | (2.2) | 15,900 | 4.7 | 4.8 | 15,400 | 4.5 | (3.1) |
| Architecture and Environmental Design | 6,500 | 2.0 | 7.3 | 6,340 | 1.9 | (2.5) | 6,540 | 1.9 | 3.2 |
| Industrial Arts | 790 | 0.2 | (16.6) | 860 | 0.3 | 8.9 | 890 | 0.3 | 3.5 |
| Visual and Performing Arts | 7,880 | 2.3 | (7.1) | 8,700 | 2.5 | 10.4 | 7,970 | 2.3 | (8.4) |
| **Health Sciences** | 13,220 | 3.9 | 10.4 | 13,410 | 3.9 | 1.4 | 13,880 | 4.0 | 3.5 |
| Allied Health | 2,820 | 0.8 | (9.3) | 3,060 | 0.9 | 8.5 | 3,200 | 0.9 | 4.6 |
| Health Sciences | 10,400 | 3.1 | 17.4 | 10,350 | 3.0 | (0.5) | 10,680 | 3.1 | 3.2 |
| **Humanities** | 12,610 | 3.7 | 5.2 | 13,030 | 3.8 | 3.3 | 11,910 | 3.5 | (8.6) |
| Foreign Languages | 2,790 | 0.8 | (8.2) | 2,850 | 0.8 | 2.2 | 2,790 | 0.8 | (2.1) |
| Letters | 5,880 | 1.7 | 4.8 | 6,250 | 1.8 | 6.3 | 5,190 | 1.6 | (17.0) |
| Philosophy and Religion | 1,300 | 0.4 | 35.4 | 1,300 | 0.4 | — | 1,390 | 0.4 | 6.9 |
| Theology | 2,640 | 0.8 | 10.9 | 2,630 | 0.8 | (0.4) | 2,540 | 0.7 | (3.4) |
| **Mathematics and Computer Sciences** | 30,850 | 9.1 | 20.1 | 35,630 | 10.4 | 15.5 | 35,910 | 10.4 | 0.8 |
| Computer and Information Sciences | 22,920 | 6.8 | 25.2 | 27,520 | 8.0 | 20.1 | 27,910 | 8.1 | 1.4 |
| Mathematics | 7,930 | 2.3 | 7.6 | 8,110 | 2.4 | 2.3 | 8,000 | 2.3 | (1.4) |
| **Physical and Life Sciences** | 25,800 | 7.6 | (3.8) | 25,960 | 7.6 | 0.6 | 26,830 | 7.8 | 3.4 |
| Life Sciences | 9,400 | 2.8 | (0.9) | 9,950 | 2.9 | 5.9 | 10,040 | 2.9 | 0.9 |
| Physical Sciences | 15,310 | 4.5 | (1.2) | 15,020 | 4.4 | (1.9) | 15,630 | 4.6 | 4.1 |
| Science Technologies | 1,090 | 0.3 | (40.8) | 990 | 0.3 | (9.2) | 1,160 | 0.3 | 17.2 |
| **Social Sciences** | 24,480 | 7.2 | 2.4 | 25,000 | 7.3 | 2.1 | 24,710 | 7.2 | (1.2) |
| Area and Ethnic Studies | 970 | 0.3 | (5.8) | 1,020 | 0.3 | 5.2 | 830 | 0.2 | (18.6) |
| Parks and Recreation | 180 | — | — | 200 | — | 11.1 | 230 | 0.1 | 15.0 |
| Protective Services | 570 | 0.2 | 18.8 | 570 | 0.2 | — | 470 | 0.1 | (17.5) |
| Psychology | 3,340 | 1.0 | 1.8 | 3,240 | 0.9 | (3.0) | 3,260 | 1.0 | 0.6 |
| Public Affairs | 3,040 | 0.9 | 17.8 | 2,600 | 0.8 | (14.5) | 2,700 | 0.8 | 3.8 |
| Social Sciences | 16,380 | 4.8 | 0.1 | 17,370 | 5.1 | 6.0 | 17,220 | 5.0 | (0.9) |
| **Other** | 23,040 | 6.8 | 4.0 | 22,250 | 6.5 | (3.4) | 23,540 | 6.9 | 5.8 |
| Communications | 3,710 | 1.1 | 0.5 | 4,060 | 1.2 | 9.4 | 4,310 | 1.3 | 6.2 |
| Communications Technologies | 480 | 0.2 | 20.0 | 390 | 0.1 | (18.8) | 590 | 0.2 | 51.3 |
| Home Economics | 2,020 | 0.6 | 6.3 | 1,870 | 0.5 | (7.4) | 1,980 | 0.6 | 5.9 |
| Law | 1,480 | 0.4 | (6.3) | 1,720 | 0.5 | 16.2 | 1,650 | 0.5 | (4.1) |
| Liberal/General Studies | 10,560 | 3.1 | 9.4 | 9,440 | 2.8 | (10.6) | 10,470 | 3.0 | 10.9 |
| Library and Archival Sciences | 570 | 0.2 | 9.6 | 610 | 0.2 | 7.0 | 690 | 0.2 | 13.1 |
| Military Sciences | — | — | — | 130 | — | | 130 | — | — |
| Military Technologies | 360 | 0.1 | 12.5 | 90 | — | (75.0) | — | — | |
| Multi/Interdisciplinary Studies | 2,160 | 0.6 | (5.7) | 2,400 | 0.7 | 11.1 | 2,090 | 0.6 | (12.9) |
| Personal and Social Development[1] | 1,440 | 0.4 | (4.0) | 1,320 | 0.4 | (8.3) | 1,360 | 0.4 | 3.0 |
| Vocational Home Economics | 260 | 0.1 | (16.1) | 220 | 0.1 | (15.4) | 270 | 0.1 | 22.7 |
| **Intensive English Language** | 11,390 | 3.4 | (16.3) | 11,010 | 3.2 | (3.3) | 12,870 | 3.7 | 16.9 |
| **Undeclared** | 20,550 | 6.1 | (19.7) | 19,940 | 5.8 | (3.0) | 20,100 | 5.9 | 0.8 |
| **TOTAL** | 338,890 | 100.0 | 0.6 | 342,110 | 100.0 | 0.9 | 343,780 | 100.0 | 0.5 |

[1] *Includes Basic Skills, Citizenship Civic Activities, Health-Related Activities, Interpersonal Skills, Leisure and Recreational Activities, and Personal Awareness*

SOURCE: Academic Science/Engineering: Granduate Enrollment and Support, Fall, 1986, National Science Foundation, Unpublished

## TABLE 1-43

FULL-TIME SCIENCE AND ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY SEX, SOURCE OF MAJOR SUPPORT, AND AREA OF STUDY, 1986

| | Total Science/Eng | | Engineering | | Physical Sciences | | Environmental Sciences | | Math/Computer Sciences | | Life Sciences | | Psychology | | Social Sciences | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| MEN | | | | | | | | | | | | | | | | |
| All Sources | 181,602 | 100.0 | 54,330 | 100.0 | 21,964 | 100.0 | 8,361 | 100.0 | 20,849 | 100.0 | 36,157 | 100.0 | 10,526 | 100.0 | 29,415 | 100.0 |
| Federal Total | 35,832 | 19.7 | 11,104 | 20.4 | 7,792 | 35.5 | 2,285 | 27.3 | 2,418 | 11.6 | 9,423 | 26.1 | 860 | 8.2 | 1,950 | 6.6 |
| DoD | 6,888 | 3.8 | 3,783 | 7.0 | 978 | 4.5 | 384 | 4.6 | 1,263 | 6.1 | 267 | 0.7 | 77 | 0.7 | 136 | 0.5 |
| HHS Total | 8,283 | 4.6 | 452 | 0.8 | 1,461 | 6.7 | 18 | 0.2 | 53 | 0.3 | 5,740 | 15.9 | 377 | 3.6 | 182 | 0.6 |
| NIH | 7,267 | 4.0 | 366 | 0.7 | 1,329 | 6.1 | 13 | 0.2 | 50 | 0.2 | 5,169 | 14.3 | 238 | 2.3 | 102 | 0.3 |
| Other | 1,016 | 0.6 | 86 | 0.2 | 132 | 0.6 | 5 | 0.1 | 3 | 0.0 | 571 | 1.6 | 139 | 1.3 | 80 | 0.3 |
| NSF | 8,621 | 4.7 | 2,749 | 5.1 | 3,078 | 14.0 | 1,010 | 12.1 | 741 | 3.6 | 719 | 2.0 | 96 | 0.9 | 228 | 0.8 |
| All Other Federal | 12,040 | 6.6 | 4,120 | 7.6 | 2,275 | 10.4 | 873 | 10.4 | 361 | 1.7 | 2,697 | 7.5 | 310 | 2.9 | 1,404 | 4.8 |
| Institutional | 72,777 | 40.1 | 17,703 | 32.6 | 11,110 | 50.6 | 3,022 | 36.1 | 9,569 | 45.9 | 14,953 | 41.4 | 4,198 | 39.9 | 12,222 | 41.6 |
| Other Outside | 21,155 | 11.6 | 9,254 | 17.0 | 1,533 | 7.0 | 1,004 | 12.0 | 1,745 | 8.4 | 4,373 | 12.1 | 624 | 5.9 | 2,622 | 8.9 |
| All Other U.S. | 14,685 | 8.1 | 7,190 | 13.2 | 1,249 | 5.7 | 725 | 8.7 | 1,194 | 5.7 | 2,535 | 7.0 | 585 | 5.6 | 1,207 | 4.1 |
| Foreign | 6,470 | 3.6 | 2,064 | 3.8 | 284 | 1.3 | 279 | 3.3 | 551 | 2.6 | 1,838 | 5.1 | 39 | 0.4 | 1,415 | 4.8 |
| Self Support | 51,838 | 28.5 | 16,269 | 29.9 | 1,529 | 7.0 | 2,050 | 24.5 | 7,117 | 34.1 | 7,408 | 20.5 | 4,844 | 46.0 | 12,621 | 42.9 |
| WOMEN | | | | | | | | | | | | | | | | |
| All Sources | 97,635 | 100.0 | 7,403 | 100.0 | 5,734 | 100.0 | 2,903 | 100.0 | 6,678 | 100.0 | 34,773 | 100.0 | 16,559 | 100.0 | 23,585 | 100.0 |
| Federal Total | 16,919 | 17.3 | 1,335 | 18.0 | 1,741 | 30.4 | 746 | 25.7 | 425 | 6.4 | 9,721 | 28.0 | 1,200 | 7.2 | 1,751 | 7.4 |
| DoD | 996 | 1.0 | 310 | 4.2 | 177 | 3.1 | 70 | 2.4 | 183 | 2.7 | 169 | 0.5 | 59 | 0.4 | 28 | 0.1 |
| HHS Total | 8,735 | 8.9 | 142 | 1.9 | 555 | 9.7 | 20 | 0.7 | 16 | 0.2 | 6,972 | 20.1 | 576 | 3.5 | 454 | 1.9 |
| NIH | 5,043 | 5.2 | 118 | 1.6 | 522 | 9.1 | 11 | 0.4 | 12 | 0.2 | 3,795 | 10.9 | 356 | 2.1 | 229 | 1.0 |
| Other | 3,692 | 3.8 | 24 | 0.3 | 33 | 0.6 | 9 | 0.3 | 4 | 0.1 | 3,177 | 9.1 | 220 | 1.3 | 225 | 1.0 |
| NSF | 2,218 | 2.3 | 367 | 5.0 | 601 | 10.5 | 340 | 11.7 | 143 | 2.1 | 492 | 1.4 | 135 | 0.8 | 140 | 0.6 |
| All Other Federal | 4,970 | 5.1 | 516 | 7.0 | 408 | 7.1 | 316 | 10.9 | 83 | 1.2 | 2,088 | 6.0 | 430 | 2.6 | 1,129 | 4.8 |
| Institutional | 38,246 | 39.2 | 2,580 | 34.9 | 3,190 | 55.6 | 1,227 | 42.3 | 3,368 | 50.4 | 12,086 | 34.8 | 6,703 | 40.5 | 9,092 | 38.5 |
| Other Outside | 6,624 | 6.8 | 1,092 | 14.8 | 400 | 7.0 | 238 | 8.2 | 436 | 6.5 | 2,320 | 6.7 | 844 | 5.1 | 1,294 | 5.5 |
| All Other U.S. | 5,361 | 5.5 | 962 | 13.0 | 343 | 6.0 | 203 | 7.0 | 327 | 4.9 | 1,798 | 5.2 | 809 | 4.9 | 919 | 3.9 |
| Foreign | 1,263 | 1.3 | 130 | 1.8 | 57 | 1.0 | 35 | 1.2 | 109 | 1.6 | 522 | 1.5 | 35 | 0.2 | 375 | 1.6 |
| Self Support | 35,846 | 36.7 | 2,396 | 32.4 | 403 | 7.0 | 692 | 23.8 | 2,449 | 36.7 | 10,646 | 30.6 | 7,812 | 47.2 | 11,448 | 48.5 |

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Source: Doctorate Records File, National Research Council Office of Scientific and Engineering Personnel

**TABLE 2-1**

PhD AWARDS BY FIELD, DECADE AND SEX

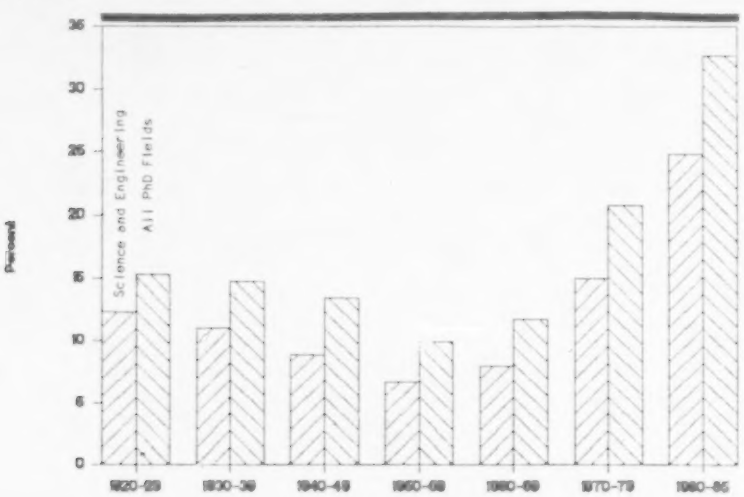
TOTAL

| | 1920-29 | 1930-39 | 1940-49 | 1950-59 | 1960-69 | 1970-79 | 1980-85 | 1920-85 |
|---|---|---|---|---|---|---|---|---|
| All Fields | 11919 | 25654 | 30575 | 80262 | 162019 | 318100 | 186993 | 815522 |
| Physical/Math Sci | 3271 | 6687 | 8202 | 18745 | 34307 | 48182 | 25978 | 145372 |
| Engineering | 228 | 833 | 1439 | 5765 | 19042 | 29683 | 16511 | 73501 |
| Life Sciences | 2370 | 5081 | 5822 | 14495 | 26461 | 69344 | 33384 | 136957 |
| Social/Behavioral Sci | 1898 | 3556 | 4001 | 13692 | 25120 | 59762 | 36678 | 144707 |
| Total S/E | 7767 | 16157 | 19464 | 52697 | 104930 | 186971 | 112551 | 500537 |
| Arts/Humanities | 2408 | 5265 | 5168 | 11361 | 22685 | 46541 | 21618 | 115046 |
| Professional Fields | 551 | 1018 | 1179 | 2717 | 6474 | 14128 | 9725 | 35792 |
| Education | 1153 | 3122 | 4759 | 13479 | 27531 | 70460 | 42935 | 163439 |

WOMEN

| | 1920-29 | 1930-39 | 1940-49 | 1950-59 | 1960-69 | 1970-79 | 1980-85 | 1920-85 |
|---|---|---|---|---|---|---|---|---|
| All Fields | 1826 | 3784 | 4115 | 7972 | 18964 | 66202 | 61160 | 164023 |
| Physical/Math Sci | 247 | 442 | 406 | 685 | 1577 | 3946 | 3565 | 10868 |
| Engineering | 2 | 6 | 7 | 20 | 77 | 624 | 787 | 1323 |
| Life Sciences | 378 | 765 | 738 | 1318 | 3078 | 8921 | 9687 | 24885 |
| Social/Behavioral Sci | 325 | 562 | 580 | 1510 | 3604 | 14641 | 13910 | 35132 |
| Total S/E | 952 | 1775 | 1731 | 3533 | 8336 | 27932 | 27949 | 72208 |
| Arts/Humanities | 619 | 1291 | 1182 | 1758 | 4423 | 14625 | 9190 | 33088 |
| Professional Fields | 38 | 78 | 113 | 249 | 798 | 2387 | 2989 | 6652 |
| Education | 209 | 615 | 1086 | 2431 | 5367 | 21258 | 20975 | 51941 |

WOMEN AS A PERCENT OF ALL FIELDS AND OF SCIENCE AND ENGINEERING FIELDS, BY DECADE



SOURCE: Summary Report 1986 Doctorate Recipients from United States Universities, National Research Council

## TABLE 2-2

DOCTORATE RECIPIENTS, 1986

| FIELD | TOTAL | WOMEN | FOREIGN-TEMP.VISA | U. S. & PERMANENT VISA | | | |
|---|---|---|---|---|---|---|---|
| | | | | INDIAN | ASIAN | BLACK | HISPANIC |
| PHYSICAL SCIENCES | 4,808 | 775 | 1,258 | 8 | 225 | 33 | 64 |
| Mathematics | 730 | 121 | 272 | 1 | 28 | 6 | 12 |
| Computer Sciences | 399 | 49 | 122 | 0 | 37 | 1 | 7 |
| Physics/Astronomy | 1,187 | 109 | 365 | 0 | 37 | 8 | 15 |
| Chemistry | 1,903 | 396 | 393 | 5 | 109 | 17 | 25 |
| Earth/Atmos./Marine | 589 | 100 | 106 | 2 | 14 | 1 | 5 |
| ENGINEERING | 3,376 | 225 | 1,369 | 6 | 262 | 24 | 35 |
| LIFE SCIENCES | 5,720 | 1,943 | 870 | 23 | 219 | 85 | 97 |
| Biological | 3,791 | 1,276 | 391 | 17 | 165 | 48 | 66 |
| Health | 772 | 479 | 99 | 6 | 29 | 21 | 12 |
| Agricultural | 1,157 | 188 | 380 | 0 | 25 | 16 | 19 |
| SOCIAL SCIENCES | 2,770 | 915 | 592 | 11 | 81 | 83 | 62 |
| PSYCHOLOGY | 3,071 | 1,564 | 80 | 9 | 40 | 108 | 88 |
| HUMANITIES | 3,461 | 1,565 | 323 | 7 | 51 | 80 | 99 |
| PROFESSIONAL FIELDS | 1,936 | 659 | 302 | 9 | 80 | 70 | 27 |
| EDUCATION | 6,602 | 3,590 | 468 | 26 | 91 | 462 | 202 |
| TOTAL ALL FIELDS | 31,770 | 11,244 | 5,267 | 99 | 1,050 | 946 | 674 |

NOTE: Total includes "other and unspecified"

SOURCE: Summary Reports: Doctorate Recipients from United States Universities, 1962, 1966, 1970, 1974, 1980, 1984, 1985, 1986 National Research Council

## TABLE 2-3

PERCENT OF S/E DOCTORAL RECIPIENTS WHO WERE FOREIGN NATIONALS ON TEMPORARY VISAS, SELECTED YEARS

| FIELD | 1962 | 1966 | 1970 | 1974 | 1980 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|
| | % | % | % | % | % | % | % | % |
| Physics/Astronomy | 13.7 | 12.2 | 11.3 | 17.2 | 19.2 | 24.6 | 26.8 | 30.7 |
| Chemistry | 9.7 | 11.1 | 7.9 | 10.2 | 15.4 | 16.9 | 18.0 | 20.7 |
| Earth/Environ. Science | 9.2 | 12.9 | 13.9 | 16.1 | 12.7 | 17.3 | 19.0 | 18.0 |
| Mathematics | 16.8 | 12.6 | 10.9 | 18.5 | 18.7 | 33.2 | 34.7 | 37.3 |
| Economics | 17.2 | 20.1 | 17.2 | 22.0 | 25.0 | 31.1 | 34.3 | 31.5 |
| Political Science | 19.1 | 13.0 | 9.3 | 10.8 | 11.9 | 15.5 | 19.4 | 19.0 |
| Engineering | 17.9 | 16.7 | 13.7 | 22.4 | 34.3 | 43.5 | 44.6 | 40.6 |
| Biological Science | 14.4 | 14.3 | 10.5 | 10.5 | 7.8 | 9.3 | 11.2 | 10.3 |
| Medical (Health) Science | 14.6 | 18.6 | 16.6 | 9.4 | 11.3 | 10.5 | 13.4 | 12.8 |
| Agricultural Science | 23.8 | 30.4 | 25.3 | 33.2 | 32.6 | 33.2 | 32.0 | 32.8 |
| TOTAL S/E | 15.2 | 15.3 | 12.5 | 16.7 | 18.8 | 19.5 | 21.2 | 21.1 |

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report, NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council, 1981-1987

## TABLE 2-4

NUMBER OF Ph.D. RECIPIENTS IN ALL SCIENCE/ENGINEERING FIELDS BY TYPE OF CITIZENSHIP, 1960-1986

| YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship Not Known |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 6,316 | 5,301 | 966 | 223 | 743 | 49 |
| 1961 | 6,757 | 5,632 | 1,032 | 182 | 850 | 93 |
| 1962 | 7,493 | 6,231 | 1,174 | 138 | 1,036 | 88 |
| 1963 | 8,279 | 6,884 | 1,258 | 234 | 1,024 | 137 |
| 1964 | 9,297 | 7,625 | 1,488 | 294 | 1,194 | 184 |
| 1965 | 10,542 | 8,590 | 1,797 | 357 | 1,440 | 155 |
| 1966 | 11,537 | 9,263 | 1,978 | 369 | 1,609 | 296 |
| 1967 | 13,065 | 10,561 | 2,253 | 568 | 1,685 | 251 |
| 1968 | 14,526 | 11,808 | 2,489 | 678 | 1,811 | 229 |
| 1969 | 16,075 | 13,080 | 2,721 | 842 | 1,879 | 274 |
| 1970 | 17,840 | 14,494 | 3,165 | 1,136 | 2,029 | 181 |
| 1971 | 19,078 | 15,300 | 3,514 | 1,411 | 2,103 | 264 |
| 1972 | 19,127 | 15,005 | 3,812 | 1,632 | 2,180 | 310 |
| 1973 | 19,121 | 14,788 | 4,004 | 1,565 | 2,439 | 329 |
| 1974 | 18,460 | 13,560 | 4,050 | 1,388 | 2,662 | 850 |
| 1975 | 18,488 | 14,107 | 4,015 | 1,257 | 2,758 | 366 |
| 1976 | 18,089 | 13,922 | 3,801 | 1,068 | 2,713 | 366 |
| 1977 | 17,641 | 13,538 | 3,609 | 982 | 2,627 | 494 |
| 1978 | 17,034 | 13,009 | 3,472 | 970 | 2,502 | 553 |
| 1979 | 17,230 | 13,195 | 3,526 | 924 | 2,602 | 509 |
| 1980 | 18,171 | 13,901 | 3,743 | 969 | 2,774 | 527 |
| 1981 | 18,662 | 14,090 | 3,919 | 927 | 2,992 | 853 |
| 1982 | 18,747 | 13,854 | 4,082 | 886 | 3,196 | 811 |
| 1983 | 18,799 | 13,742 | 4,361 | 921 | 3,440 | 696 |
| 1984 | 19,008 | 13,686 | 4,562 | 855 | 3,707 | 760 |
| 1985 | 19,164 | 13,300 | 5,002 | 939 | 4,063 | 862 |
| 1986 | 19,745 | 13,269 | 5,173 | 1,007 | 4,166 | 1,303 |

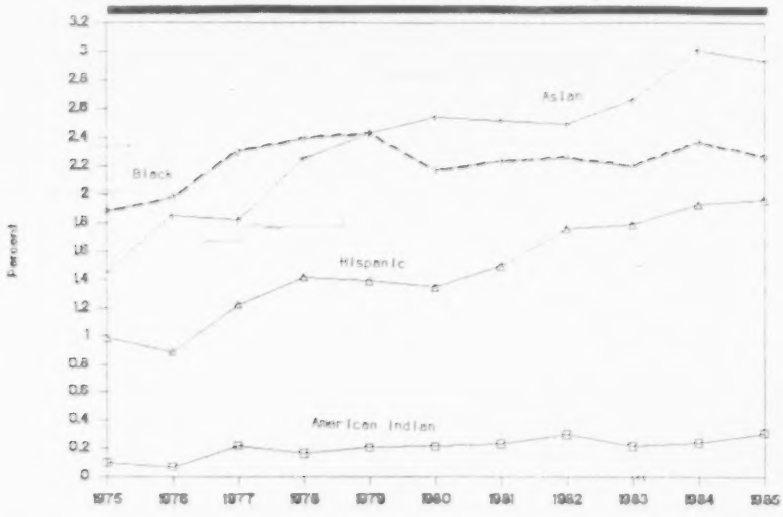
## TABLE 2-5

SOURCE: National Research Council, Survey of Earned Doctorates, Unpublished data, 1987

Ph D AWARDS TO U.S. CITIZENS BY BROAD FIELD, RACIAL/ETHNIC GROUP AND SEX, 1975 - 1985

| Year | Total | Men | Women | %W | Am. Ind. Men | Am. Ind. Women | Asian Men | Asian Women | Black Men | Black Women | Hispanic Men | Hispanic Women | % Min | White Men | White Women |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL SCIENCE AND ENGINEERING | | | | | | | | | | | | | | | |
| 1975 | 13853 | 11402 | 2451 | 18 | 11 | 3 | 165 | 36 | 190 | 71 | 121 | 16 | 4.4 | 10915 | 2325 |
| 1976 | 13749 | 11146 | 2603 | 19 | 10 | 0 | 203 | 51 | 178 | 94 | 110 | 12 | 4.8 | 10645 | 2446 |
| 1977 | 13252 | 10583 | 2669 | 20 | 21 | 8 | 198 | 43 | 202 | 103 | 132 | 30 | 5.6 | 10030 | 2480 |
| 1978 | 12715 | 9915 | 2800 | 22 | 19 | 2 | 225 | 61 | 195 | 109 | 136 | 44 | 6.2 | 9340 | 2584 |
| 1979 | 12958 | 9849 | 3109 | 24 | 22 | 5 | 242 | 73 | 184 | 131 | 132 | 48 | 6.5 | 9269 | 2852 |
| 75-79 | 66527 | 52895 | 13632 | 20 | 83 | 18 | 1033 | 264 | 949 | 508 | 631 | 150 | 5.5 | 50199 | 12687 |
| 1980 | 12955 | 9612 | 3343 | 26 | 20 | 8 | 244 | 85 | 147 | 134 | 128 | 46 | 6.3 | 9073 | 3064 |
| 1981 | 13325 | 9736 | 3589 | 27 | 22 | 9 | 249 | 87 | 161 | 137 | 141 | 58 | 6.5 | 9163 | 3298 |
| 1982 | 13314 | 9549 | 3765 | 28 | 28 | 12 | 225 | 107 | 167 | 134 | 166 | 68 | 6.8 | 8963 | 3444 |
| 1983 | 13365 | 9296 | 4069 | 30 | 24 | 5 | 243 | 112 | 152 | 142 | 141 | 98 | 6.9 | 8736 | 3712 |
| 1984 | 13322 | 9148 | 4174 | 31 | 27 | 5 | 279 | 122 | 163 | 153 | 174 | 83 | 7.6 | 8505 | 3811 |
| 80-84 | 66281 | 47341 | 18940 | 29 | 121 | 39 | 1240 | 513 | 790 | 700 | 750 | 353 | 6.8 | 44440 | 17329 |
| 1985 | 12940 | 8819 | 4121 | 32 | 22 | 18 | 263 | 117 | 157 | 136 | 153 | 101 | 7.5 | 8224 | 3749 |
| Total | 145748 | 109055 | 36693 | 25 | 226 | 75 | 2536 | 894 | 1896 | 1344 | 1534 | 604 | 6.2 | 102863 | 33765 |

Science and Engineering Doctorates Awarded to U.S. Minorities as a Percent of Science and Engineering Doctorates Awarded to U.S. Citizens, 1975-1985



SOURCE: National Research Council, Survey of Earned Doctorates, Unpublished data, 1987

## TABLE 2-5 (continued)

Ph D AWARDS TO U.S. CITIZENS BY BROAD FIELD, RACIAL/ETHNIC GROUP AND SEX, 1975 - 1985

| Year | Total | Men | Women | % W | Am. Ind. Men | Am. Ind. Women | Asian Men | Asian Women | Black Men | Black Women | Hispanic Men | Hispanic Women | % Min | White Men | White Women |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TOTAL ALL FIELDS** | | | | | | | | | | | | | | | |
| 1975 | 25976 | 19777 | 6199 | 24 | 27 | 9 | 222 | 64 | 650 | 349 | 242 | 61 | 6 | 18636 | 5716 |
| 1976 | 26182 | 19551 | 6631 | 25 | 31 | 9 | 244 | 90 | 652 | 443 | 253 | 87 | 7 | 18371 | 6002 |
| 1977 | 25008 | 18299 | 6709 | 27 | 43 | 22 | 251 | 88 | 684 | 432 | 310 | 113 | 8 | 17011 | 6054 |
| 1978 | 23767 | 16811 | 6956 | 29 | 50 | 10 | 287 | 103 | 584 | 449 | 317 | 156 | 8 | 15573 | 6238 |
| 1979 | 23947 | 16487 | 7460 | 31 | 56 | 25 | 311 | 117 | 551 | 505 | 308 | 154 | 8 | 15261 | 6659 |
| 75-77 | 124880 | 90925 | 33955 | 27 | 207 | 75 | 1315 | 462 | 3121 | 2178 | 1430 | 571 | 7 | 84852 | 30669 |
| 1980 | 23970 | 15962 | 8008 | 33 | 46 | 29 | 313 | 145 | 499 | 533 | 256 | 156 | 8 | 14848 | 7145 |
| 1981 | 24006 | 15603 | 8403 | 35 | 56 | 29 | 315 | 150 | 499 | 514 | 275 | 189 | 8 | 14458 | 7521 |
| 1982 | 23785 | 15137 | 8648 | 36 | 44 | 33 | 281 | 171 | 483 | 564 | 344 | 191 | 9 | 13985 | 7689 |
| 1983 | 23704 | 14661 | 9043 | 38 | 50 | 30 | 312 | 180 | 412 | 509 | 288 | 250 | 9 | 13599 | 8074 |
| 1984 | 23394 | 14285 | 9109 | 39 | 53 | 20 | 338 | 174 | 427 | 526 | 313 | 222 | 9 | 13154 | 8167 |
| 80-85 | 118859 | 75648 | 43211 | 36 | 249 | 141 | 1559 | 820 | 2320 | 2646 | 1476 | 1008 | 9 | 70044 | 38596 |
| 1985 | 22717 | 13793 | 8924 | 39 | 39 | 54 | 328 | 187 | 374 | 531 | 298 | 261 | 9 | 12750 | 7891 |
| Total | 266456 | 180366 | 86090 | 32 | 495 | 270 | 3202 | 1469 | 5815 | 5355 | 3204 | 1840 | 8 | 167646 | 77156 |
| **PHYSICAL SCIENCES** | | | | | | | | | | | | | | | |
| 1975 | 3476 | 3199 | 277 | 8 | 3 | 0 | 46 | 4 | 36 | 5 | 25 | 2 | 3 | 3089 | 266 |
| 1976 | 3265 | 2969 | 296 | 9 | 0 | 0 | 56 | 14 | 22 | 6 | 22 | 1 | 4 | 2869 | 275 |
| 1977 | 3149 | 2851 | 298 | 9 | 7 | 0 | 53 | 3 | 39 | 3 | 41 | 5 | 5 | 2711 | 282 |
| 1978 | 2943 | 2630 | 313 | 11 | 4 | 1 | 67 | 14 | 44 | 7 | 24 | 2 | 6 | 2491 | 289 |
| 1979 | 3042 | 2684 | 358 | 12 | 4 | 0 | 63 | 14 | 44 | 4 | 27 | 10 | 5 | 2546 | 330 |
| 75-97 | 15875 | 14333 | 1542 | 10 | 18 | 1 | 285 | 49 | 185 | 25 | 139 | 20 | 5 | 13706 | 1442 |
| 1980 | 2847 | 2487 | 360 | 13 | 4 | 1 | 64 | 11 | 18 | 7 | 22 | 5 | 5 | 2379 | 336 |
| 1981 | 2893 | 2536 | 357 | 12 | 2 | 0 | 61 | 13 | 26 | 5 | 31 | 5 | 5 | 2416 | 334 |
| 1982 | 3028 | 2593 | 435 | 14 | 5 | 0 | 55 | 26 | 23 | 7 | 25 | 9 | 5 | 2485 | 393 |
| 1983 | 3022 | 2563 | 459 | 15 | 9 | 0 | 69 | 24 | 21 | 5 | 22 | 15 | 5 | 2442 | 415 |
| 1984 | 3025 | 2539 | 486 | 16 | 7 | 0 | 82 | 24 | 30 | 5 | 44 | 9 | 7 | 2376 | 448 |
| 80-84 | 14815 | 12718 | 2097 | 14 | 27 | 1 | 331 | 98 | 118 | 29 | 144 | 43 | 5 | 12098 | 1926 |
| 1985 | 2947 | 2454 | 493 | 17 | 4 | 0 | 74 | 26 | 25 | 5 | 32 | 10 | 6 | 2319 | 452 |
| Total | 33637 | 29505 | 4132 | 12 | 49 | 2 | 690 | 173 | 328 | 59 | 315 | 73 | 5 | 28123 | 3820 |

SOURCE: National Research Council, Survey of Earned Doctorates, Unpublished data, 1987

## TABLE 2-5 (continued)

Ph D AWARDS TO U.S. CITIZENS BY BROAD FIELD, RACIAL/ETHNIC GROUP AND SEX, 1975 - 1985

| Year | Total | Men | Women | % W | Am. Ind. Men | Am. Ind. Women | Asian Men | Asian Women | Black Men | Black Women | Hispanic Men | Hispanic Women | % Min | White Men | White Women |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ENGINEERING** | | | | | | | | | | | | | | | |
| 1975 | 1641 | 1609 | 32 | 2 | 1 | 0 | 60 | 1 | 11 | 0 | 15 | 0 | 5 | 1522 | 31 |
| 1976 | 1506 | 1473 | 33 | 2 | 0 | 0 | 57 | 2 | 12 | 0 | 15 | 0 | 6 | 1389 | 31 |
| 1977 | 1401 | 1361 | 40 | 3 | 1 | 0 | 66 | 1 | 10 | 1 | 18 | 0 | 7 | 1266 | 38 |
| 1978 | 1167 | 1140 | 27 | 2 | 2 | 0 | 63 | 0 | 9 | 0 | 19 | 0 | 8 | 1047 | 27 |
| 1979 | 1189 | 1156 | 35 | 3 | 3 | 0 | 69 | 0 | 16 | 1 | 14 | 1 | 9 | 1052 | 33 |
| 75-79 | 6904 | 6737 | 167 | 2 | 7 | 0 | 315 | 4 | 58 | 2 | 81 | 1 | 7 | 6276 | 160 |
| 1980 | 1173 | 1115 | 58 | 5 | 3 | 0 | 71 | 2 | 9 | 2 | 17 | 1 | 9 | 1015 | 53 |
| 1981 | 1118 | 1069 | 49 | 4 | 4 | 0 | 71 | 6 | 16 | 0 | 12 | 0 | 10 | 966 | 43 |
| 1982 | 1122 | 1049 | 73 | 7 | 3 | 0 | 69 | 3 | 9 | 0 | 22 | 1 | 10 | 946 | 69 |
| 1983 | 1119 | 1039 | 80 | 7 | 0 | 0 | 63 | 3 | 18 | 1 | 15 | 3 | 9 | 943 | 73 |
| 1984 | 1193 | 1107 | 86 | 7 | 3 | 0 | 79 | 16 | 11 | 1 | 18 | 4 | 11 | 996 | 65 |
| 80-84 | 5725 | 5379 | 346 | 6 | 13 | 0 | 353 | 30 | 63 | 4 | 84 | 9 | 10 | 4866 | 303 |
| 1985 | 1223 | 1109 | 114 | 9 | 1 | 0 | 76 | 14 | 16 | 3 | 16 | 0 | 10 | 1000 | 97 |
| Total | 13852 | 13225 | 627 | 5 | 21 | 0 | 744 | 48 | 137 | 9 | 181 | 10 | 8 | 12142 | 560 |
| **LIFE SCIENCES** | | | | | | | | | | | | | | | |
| 1975 | 3801 | 2985 | 816 | 21 | 1 | 1 | 33 | 21 | 37 | 19 | 34 | 5 | 4 | 2880 | 770 |
| 1976 | 3839 | 3027 | 812 | 21 | 3 | 0 | 54 | 23 | 40 | 31 | 26 | 3 | 5 | 2904 | 755 |
| 1977 | 3742 | 2914 | 828 | 22 | 7 | 1 | 41 | 22 | 30 | 34 | 22 | 9 | 4 | 2814 | 762 |
| 1978 | 3791 | 2890 | 901 | 24 | 8 | 0 | 64 | 26 | 45 | 28 | 31 | 14 | 6 | 2742 | 833 |
| 1979 | 3943 | 2928 | 1015 | 26 | 3 | 0 | 69 | 36 | 29 | 33 | 28 | 14 | 5 | 2799 | 932 |
| 75-79 | 19116 | 14744 | 4372 | 23 | 22 | 2 | 261 | 128 | 181 | 145 | 141 | 45 | 5 | 14139 | 4052 |
| 1980 | 4168 | 3021 | 1147 | 28 | 5 | 2 | 66 | 36 | 37 | 28 | 24 | 12 | 5 | 2889 | 1063 |
| 1981 | 4331 | 3071 | 1260 | 29 | 9 | 4 | 72 | 37 | 31 | 42 | 34 | 14 | 6 | 2925 | 1163 |
| 1982 | 4476 | 3102 | 1374 | 31 | 7 | 5 | 65 | 47 | 33 | 36 | 41 | 21 | 6 | 2956 | 1265 |
| 1983 | 4333 | 2888 | 1445 | 33 | 6 | 2 | 75 | 57 | 30 | 34 | 24 | 24 | 6 | 2753 | 1328 |
| 9184 | 4442 | 2954 | 1488 | 33 | 9 | 3 | 77 | 56 | 36 | 39 | 33 | 21 | 6 | 2799 | 1369 |
| 80-84 | 21750 | 15036 | 6714 | 31 | 36 | 16 | 355 | 233 | 167 | 179 | 156 | 92 | 6 | 14322 | 6188 |
| 1985 | 4338 | 2841 | 1497 | 35 | 9 | 9 | 79 | 49 | 37 | 33 | 43 | 32 | 7 | 2673 | 1374 |
| Total | 45204 | 32621 | 12583 | 28 | 67 | 27 | 695 | 410 | 385 | 357 | 340 | 169 | 5 | 31134 | 11614 |

SOURCE: National Research Council, Survey of Earned Doctorates, Unpublished data, 1987

## TABLE 2-5 (continued)

Ph D AWARDS TO U.S. CITIZENS BY BROAD FIELD, RACIAL/ETHNIC GROUP AND SEX, 1975 - 1985

| Year | Total | Men | Women | % W | Am. Ind. Men | Am. Ind. Women | Asian Men | Asian Women | Black Men | Black Women | Hispanic Men | Hispanic Women | % Min | White Men | White Women |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOCIAL SCIENCES** | | | | | | | | | | | | | | | |
| 1975 | 6935 | 3609 | 1326 | 27 | 6 | 2 | 26 | 10 | 106 | 47 | 47 | 9 | 5 | 3424 | 1258 |
| 1976 | 5139 | 3677 | 1462 | 28 | 7 | 0 | 36 | 12 | 104 | 57 | 47 | 8 | 5 | 3483 | 1385 |
| 1977 | 4960 | 3457 | 1503 | 30 | 6 | 7 | 38 | 17 | 123 | 65 | 51 | 16 | 7 | 3239 | 1398 |
| 1978 | 4814 | 3255 | 1559 | 32 | 5 | 1 | 31 | 21 | 97 | 74 | 62 | 28 | 7 | 3060 | 1435 |
| 1979 | 4784 | 3083 | 1701 | 36 | 12 | 5 | 41 | 23 | 95 | 93 | 63 | 23 | 7 | 2872 | 1557 |
| 75-79 | 24632 | 17081 | 7551 | 31 | 36 | 15 | 172 | 83 | 525 | 336 | 270 | 84 | 6 | 16078 | 7033 |
| 1980 | 4767 | 2989 | 1778 | 37 | 8 | 5 | 43 | 36 | 83 | 97 | 65 | 28 | 8 | 2790 | 1612 |
| 1981 | 4983 | 3060 | 1923 | 39 | 7 | 5 | 45 | 31 | 88 | 90 | 64 | 39 | 7 | 2856 | 1758 |
| 1982 | 4688 | 2805 | 1883 | 40 | 13 | 7 | 36 | 31 | 102 | 91 | 78 | 37 | 8 | 2576 | 1717 |
| 1983 | 4891 | 2806 | 2085 | 43 | 9 | 3 | 36 | 28 | 83 | 102 | 80 | 56 | 8 | 2598 | 1896 |
| 1984 | 4662 | 2548 | 2114 | 45 | 8 | 2 | 41 | 26 | 86 | 108 | 79 | 49 | 9 | 2334 | 1929 |
| 80-84 | 23991 | 14208 | 9783 | 41 | 45 | 22 | 201 | 152 | 442 | 488 | 366 | 209 | 8 | 13154 | 8912 |
| 1985 | 4432 | 2415 | 2017 | 46 | 8 | 9 | 34 | 28 | 79 | 95 | 62 | 59 | 8 | 2232 | 1826 |
| Total | 53055 | 33704 | 19351 | 36 | 89 | 46 | 407 | 263 | 1046 | 919 | 698 | 352 | 7 | 31464 | 17771 |
| **HUMANITIES** | | | | | | | | | | | | | | | |
| 1975 | 4249 | 2799 | 1450 | 34 | 3 | 2 | 17 | 13 | 60 | 27 | 40 | 24 | 4 | 2679 | 1384 |
| 1976 | 4126 | 2698 | 1428 | 35 | 2 | 1 | 15 | 18 | 53 | 35 | 47 | 24 | 5 | 2581 | 1347 |
| 1977 | 3845 | 2438 | 1407 | 37 | 3 | 2 | 25 | 13 | 65 | 30 | 65 | 38 | 6 | 2280 | 1324 |
| 1978 | 3558 | 2193 | 1365 | 38 | 7 | 1 | 17 | 12 | 48 | 32 | 55 | 54 | 6 | 2066 | 1266 |
| 1979 | 3436 | 2111 | 1325 | 39 | 7 | 3 | 29 | 16 | 63 | 56 | 60 | 47 | 8 | 1952 | 1203 |
| 75-79 | 19214 | 12239 | 6975 | 36 | 22 | 9 | 103 | 72 | 289 | 180 | 267 | 187 | 6 | 11558 | 6524 |
| 1980 | 3238 | 1931 | 1307 | 40 | 1 | 2 | 23 | 17 | 56 | 41 | 39 | 40 | 7 | 1812 | 1207 |
| 1981 | 3090 | 1798 | 1292 | 42 | 8 | 4 | 19 | 14 | 43 | 41 | 49 | 43 | 7 | 1679 | 1190 |
| 1982 | 2938 | 1650 | 1288 | 44 | 2 | 4 | 14 | 14 | 46 | 50 | 55 | 52 | 8 | 1533 | 1168 |
| 1983 | 2902 | 1604 | 1298 | 45 | 4 | 2 | 16 | 19 | 36 | 37 | 46 | 50 | 7 | 1502 | 1190 |
| 1984 | 2877 | 1554 | 1323 | 46 | 3 | 2 | 13 | 15 | 45 | 49 | 57 | 42 | 8 | 1436 | 1215 |
| 80-84 | 15045 | 8537 | 6508 | 43 | 18 | 14 | 85 | 79 | 226 | 218 | 246 | 227 | 7 | 7962 | 5970 |
| 1985 | 2780 | 1556 | 1224 | 44 | 2 | 6 | 26 | 17 | 31 | 36 | 51 | 45 | 8 | 1446 | 1120 |
| Total | 37039 | 22332 | 14707 | 40 | 42 | 29 | 214 | 168 | 546 | 434 | 564 | 459 | 7 | 20966 | 13614 |

SOURCE: National Research Council, Survey of Earned Doctorates, Unpublished data, 1987

## TABLE 2-5 (continued)

Ph D AWARDS TO U.S. CITIZENS BY BROAD FIELD, RACIAL/ETHNIC GROUP AND SEX, 1975 - 1985

| Year | Total | Men | Women | % W | Am. Ind. Men | Am. Ind. Women | Asian Men | Asian Women | Black Men | Black Women | Hispanic Men | Hispanic Women | % Min | White Men | White Women |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROFESSIONAL AND OTHER FIELDS | | | | | | | | | | | | | | | |
| 1975 | 1271 | 1059 | 212 | 17 | 0 | 1 | 13 | 3 | 24 | 18 | 9 | 1 | 5 | 1013 | 189 |
| 1976 | 1382 | 1082 | 300 | 22 | 4 | 2 | 8 | 2 | 35 | 23 | 19 | 7 | 7 | 1016 | 266 |
| 1977 | 1312 | 1019 | 293 | 22 | 2 | 0 | 12 | 2 | 25 | 24 | 20 | 3 | 7 | 960 | 264 |
| 1978 | 1319 | 1032 | 287 | 22 | 2 | 0 | 13 | 5 | 42 | 21 | 20 | 8 | 8 | 955 | 253 |
| 1979 | 1309 | 958 | 351 | 27 | 3 | 1 | 7 | 7 | 40 | 24 | 11 | 2 | 7 | 897 | 317 |
| 75-79 | 6593 | 5150 | 1443 | 22 | 11 | 4 | 53 | 19 | 166 | 110 | 79 | 21 | 7 | 4841 | 1289 |
| 1980 | 1281 | 902 | 379 | 30 | 0 | 1 | 18 | 6 | 36 | 27 | 12 | 3 | 8 | 836 | 342 |
| 1981 | 1231 | 831 | 400 | 32 | 2 | 1 | 10 | 7 | 28 | 39 | 9 | 11 | 9 | 782 | 342 |
| 1982 | 1362 | 891 | 471 | 35 | 1 | 1 | 18 | 5 | 36 | 37 | 13 | 5 | 9 | 823 | 423 |
| 1983 | 1302 | 870 | 432 | 33 | 1 | 0 | 19 | 9 | 25 | 37 | 11 | 11 | 9 | 814 | 375 |
| 1984 | 1394 | 876 | 518 | 37 | 4 | 0 | 19 | 4 | 28 | 29 | 21 | 13 | 8 | 804 | 472 |
| 80-84 | 6570 | 4370 | 2200 | 33 | 8 | 3 | 84 | 31 | 153 | 169 | 66 | 43 | 8 | 4059 | 1954 |
| 1985 | 1329 | 833 | 496 | 37 | 3 | 3 | 15 | 8 | 33 | 41 | 12 | 17 | 10 | 770 | 427 |
| Total | 14492 | 10353 | 4139 | 29 | 22 | 10 | 152 | 58 | 352 | 320 | 157 | 81 | 8 | 9670 | 3670 |
| EDUCATION | | | | | | | | | | | | | | | |
| 1975 | 6603 | 4517 | 2086 | 32 | 13 | 3 | 27 | 12 | 376 | 233 | 72 | 20 | 11 | 4029 | 1818 |
| 1976 | 6925 | 4625 | 2300 | 33 | 15 | 6 | 18 | 19 | 386 | 288 | 77 | 44 | 12 | 4129 | 1943 |
| 1977 | 6599 | 4259 | 2340 | 35 | 17 | 12 | 16 | 25 | 392 | 275 | 93 | 42 | 13 | 3741 | 1986 |
| 1978 | 6175 | 3671 | 2504 | 41 | 22 | 7 | 32 | 25 | 299 | 287 | 106 | 50 | 13 | 3212 | 2135 |
| 1979 | 6244 | 3569 | 2675 | 43 | 24 | 16 | 33 | 21 | 264 | 294 | 105 | 57 | 13 | 3143 | 2287 |
| 75-79 | 32546 | 20641 | 11905 | 37 | 91 | 44 | 126 | 102 | 1717 | 1377 | 453 | 213 | 13 | 18254 | 10169 |
| 1980 | 6496 | 3517 | 2979 | 46 | 25 | 18 | 28 | 37 | 260 | 331 | 77 | 67 | 13 | 3127 | 2526 |
| 1981 | 6360 | 3238 | 3122 | 49 | 24 | 15 | 37 | 42 | 267 | 297 | 76 | 77 | 13 | 2834 | 2691 |
| 1982 | 6171 | 3047 | 3124 | 51 | 13 | 16 | 24 | 45 | 234 | 343 | 110 | 66 | 14 | 2666 | 2654 |
| 1983 | 6135 | 2891 | 3244 | 53 | 21 | 23 | 34 | 40 | 199 | 293 | 90 | 91 | 13 | 2547 | 2797 |
| 1984 | 5801 | 2707 | 3094 | 53 | 19 | 13 | 27 | 33 | 191 | 295 | 61 | 84 | 12 | 2409 | 2669 |
| 80-84 | 30963 | 15400 | 15563 | 50 | 102 | 85 | 150 | 197 | 1151 | 1559 | 414 | 385 | 13 | 13583 | 13337 |
| 1985 | 5668 | 2585 | 3083 | 54 | 12 | 27 | 24 | 45 | 157 | 318 | 82 | 98 | 13 | 2310 | 2595 |
| Total | 69177 | 38626 | 30551 | 44 | 205 | 156 | 300 | 344 | 3025 | 3254 | 949 | 696 | 13 | 34147 | 26101 |

SOURCE: Summary Report, Doctorate Recipients from U.S. Universities, 1985, National Research Council

## TABLE 2-6

DOCTORAL RECIPIENTS WHO ARE U.S. CITIZENS OR HAVE PERMANENT VISAS, BY FIELD, DEGREE COHORT, AND RACIAL/ETHNIC GROUP, 1985

| FIELD | | WHITE | | BLACK | | AM. INDIAN | | HISPANIC | | ASIAN | | OTHER/UNKNOWN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| **ALL FIELDS** | **24,561** | **21,174** | **86.2** | **1,040** | **4.2** | **93** | **0.4** | **631** | **2.6** | **1,067** | **4.3** | **556** | **2.3** |
| MATHEMATICS | 418 | 350 | 83.7 | 7 | 1.7 | 0 | - | 12 | 2.9 | 33 | 7.9 | 16 | 3.8 |
| COMPUTER SCIENCES | 213 | 177 | 83.1 | 3 | 1.4 | 0 | - | 6 | 2.8 | 17 | 8.0 | 10 | 4.7 |
| PHYSICS/ASTRONOMY | 744 | 656 | 88.2 | 4 | 0.5 | 1 | 0.1 | 13 | 0.8 | 37 | 2.8 | 33 | 1.6 |
| CHEMISTRY | 1,431 | 1,242 | 86.8 | 23 | 1.6 | 2 | 0.1 | 17 | 1.2 | 112 | 7.8 | 35 | 2.4 |
| EARTH/ ENV./ MARINE | 475 | 431 | 90.7 | 4 | 0.8 | 1 | 0.2 | 6 | 1.3 | 21 | 4.4 | 12 | 2.5 |
| ENGINEERING | 1,594 | 1,188 | 74.5 | 34 | 2.1 | 1 | 0.1 | 22 | 1.4 | 281 | 17.6 | 68 | 4.3 |
| BIOLOGICAL SCIENCES | 3,234 | 2,890 | 89.4 | 53 | 1.6 | 13 | 0.4 | 59 | 1.8 | 151 | 4.7 | 68 | 2.1 |
| AGRICULTURAL SCIENCES | 813 | 731 | 89.9 | 22 | 2.7 | 4 | 0.5 | 15 | 1.8 | 26 | 3.2 | 15 | 1.8 |
| MEDICAL/HEALTH SCIENCES | 572 | 491 | 85.8 | 23 | 4.0 | 1 | 0.2 | 14 | 2.4 | 33 | 5.8 | 10 | 1.7 |
| SOCIAL SCIENCES | 1,917 | 1,601 | 83.5 | 100 | 5.2 | 7 | 0.4 | 66 | 3.4 | 74 | 3.9 | 69 | 3.6 |
| PSYCHOLOGY | 2,830 | 2,558 | 90.4 | 105 | 3.7 | 10 | 0.4 | 68 | 2.4 | 44 | 1.6 | 45 | 1.6 |
| LANGUAGES & LITERATURE | 1,044 | 917 | 87.8 | 19 | 1.8 | 1 | 0.1 | 68 | 6.5 | 18 | 1.7 | 21 | 2.0 |
| OTHER HUMANITIES | 1,954 | 1,747 | 89.4 | 56 | 2.9 | 7 | 0.4 | 45 | 2.3 | 49 | 2.5 | 50 | 2.6 |
| PROFESSIONAL FIELDS | 1,419 | 1,206 | 85.0 | 81 | 5.7 | 5 | 0.3 | 31 | 2.2 | 72 | 5.1 | 24 | 1.7 |
| EDUCATION | 5,872 | 4,963 | 84.5 | 503 | 8.6 | 39 | 0.7 | 189 | 3.2 | 98 | 1.7 | 80 | 1.4 |

SOURCE: Summary Report, Doctorate Recipients from U.S. Universities, 1975 through 1985, and Special Tabulations, National Research Council

TABLE 2-7

**NUMBER AND PERCENT OF PH.D.S AWARDED TO U.S. MINORITIES AND TO FOREIGN CITIZENS IN ALL FIELDS AND IN SCIENCE AND ENGINEERING*, 1975-1985**

| YEAR | | TOTAL DEGREES | | U.S. CITIZENS | | | | | | | | | | FOREIGN CITIZENS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLACK | | HISPANIC | | AM. INDIAN | | ASIAN | | ALL MINORITIES | | TEMP. VISA | | PERM. VISA | |
| | | ALL FIELDS | S/E | ALL | S/E | ALL | S/E | ALL | S/E | ALL | S/E | ALL | S/E | ALL | S/E | ALL | S/E |
| 1975 | N | 32,913 | 19,048 | 999 | 261 | 303 | 137 | 36 | 14 | 286 | 201 | 1,624 | 613 | 3,531 | 2,797 | 1,709 | 1,290 |
| | % | 100.0 | 100.0 | 3.0 | 1.4 | 0.9 | 0.7 | 0.1 | 0.1 | 0.9 | 1.1 | 4.9 | 3.2 | 10.7 | 14.7 | 5.2 | 6.8 |
| 1976 | N | 32,923 | 18,790 | 1,095 | 272 | 340 | 122 | 40 | 10 | 334 | 254 | 1,809 | 658 | 3,518 | 2,772 | 1,491 | 1,133 |
| | % | 100.0 | 100.0 | 3.3 | 1.5 | 1.0 | 0.7 | 0.1 | 0.1 | 1.0 | 1.3 | 5.5 | 3.6 | 10.7 | 14.8 | 4.5 | 6.0 |
| 1977 | N | 31,672 | 18,281 | 1,116 | 305 | 423 | 162 | 65 | 29 | 339 | 241 | 1,943 | 737 | 3,447 | 2,678 | 1,364 | 1,028 |
| | % | 100.0 | 100.0 | 3.5 | 1.7 | 1.3 | 0.9 | 0.2 | 0.2 | 1.1 | 1.3 | 6.1 | 4.1 | 10.9 | 14.6 | 4.3 | 5.6 |
| 1978 | N | 30,850 | 17,956 | 1,033 | 304 | 473 | 180 | 60 | 21 | 390 | 286 | 1,952 | 791 | 3,416 | 2,606 | 1,343 | 1,013 |
| | % | 100.0 | 100.0 | 3.3 | 1.8 | 1.5 | 1.0 | 0.2 | 0.2 | 1.3 | 1.6 | 6.3 | 4.5 | 11.1 | 14.5 | 4.4 | 5.6 |
| 1979 | N | 31,200 | 18,247 | 1,056 | 315 | 462 | 180 | 81 | 27 | 428 | 315 | 2,027 | 837 | 3,574 | 2,713 | 1,314 | 982 |
| | % | 100.0 | 100.0 | 3.4 | 1.8 | 1.5 | 1.0 | 0.3 | 0.2 | 1.4 | 1.7 | 6.5 | 4.6 | 11.5 | 14.9 | 4.2 | 5.4 |
| 1980 | N | 30,982 | 18,171 | 1,032 | 281 | 412 | 174 | 75 | 28 | 458 | 329 | 1,977 | 812 | 3,632 | 2,775 | 1,286 | 977 |
| | % | 100.0 | 100.0 | 3.3 | 1.6 | 1.3 | 1.0 | 0.2 | 0.2 | 1.5 | 1.8 | 6.4 | 4.5 | 11.7 | 15.3 | 4.2 | 5.4 |
| 1981 | N | 31,319 | 18,662 | 1,013 | 298 | 464 | 199 | 85 | 31 | 465 | 336 | 2,027 | 864 | 3,924 | 2,990 | 1,272 | 927 |
| | % | 100.0 | 100.0 | 3.2 | 1.6 | 1.5 | 1.0 | 0.3 | 0.2 | 1.5 | 1.8 | 6.5 | 4.6 | 12.5 | 16.0 | 4.1 | 5.0 |
| 1982 | N | 31,048 | 18,748 | 1,047 | 301 | 535 | 234 | 77 | 40 | 452 | 332 | 2,111 | 907 | 4,189 | 3,196 | 1,224 | 879 |
| | % | 100.0 | 100.0 | 3.3 | 1.7 | 1.7 | 1.3 | 0.2 | 0.2 | 1.4 | 1.8 | 6.8 | 5.0 | 13.5 | 17.0 | 3.9 | 4.7 |
| 1983 | N | 31,190 | 18,799 | 921 | 294 | 538 | 239 | 80 | 29 | 492 | 355 | 2,031 | 917 | 4,495 | 3,443 | 1,272 | 921 |
| | % | 100.0 | 100.0 | 2.9 | 1.6 | 1.7 | 1.2 | 0.3 | 0.2 | 1.6 | 1.9 | 6.5 | 4.9 | 14.4 | 18.3 | 4.1 | 4.9 |
| 1984 | N | 31,253 | 19,008 | 953 | 316 | 535 | 257 | 73 | 32 | 512 | 401 | 2,073 | 1,006 | 4,817 | 3,714 | 1,216 | 856 |
| | % | 100.0 | 100.0 | 3.0 | 1.7 | 1.7 | 1.3 | 0.2 | 0.2 | 1.6 | 2.1 | 6.6 | 5.3 | 15.4 | 19.5 | 3.9 | 4.5 |
| 1985 | N | 31,202 | 19,164 | 909 | 293 | 559 | 254 | 93 | 40 | 515 | 380 | 2,076 | 967 | 5,214 | 4,067 | 1,320 | 945 |
| | % | 100.0 | 100.0 | 2.9 | 1.5 | 1.8 | 1.3 | 0.3 | 0.2 | 1.7 | 2.0 | 6.7 | 5.0 | 16.7 | 21.2 | 4.2 | 4.9 |

*Includes Social and Behavioral Sciences

SOURCE: Summary Report, Doctorate Recipients from U.S. Universities, 1974 to 1985, National Research Council

## TABLE 2-8

NUMBER OF DOCTORATE RECIPIENTS BY SOURCES OF SUPPORT IN GRADUATE SCHOOL, FISCAL YEARS 1974, 1978, 1982, 1984 AND 1985

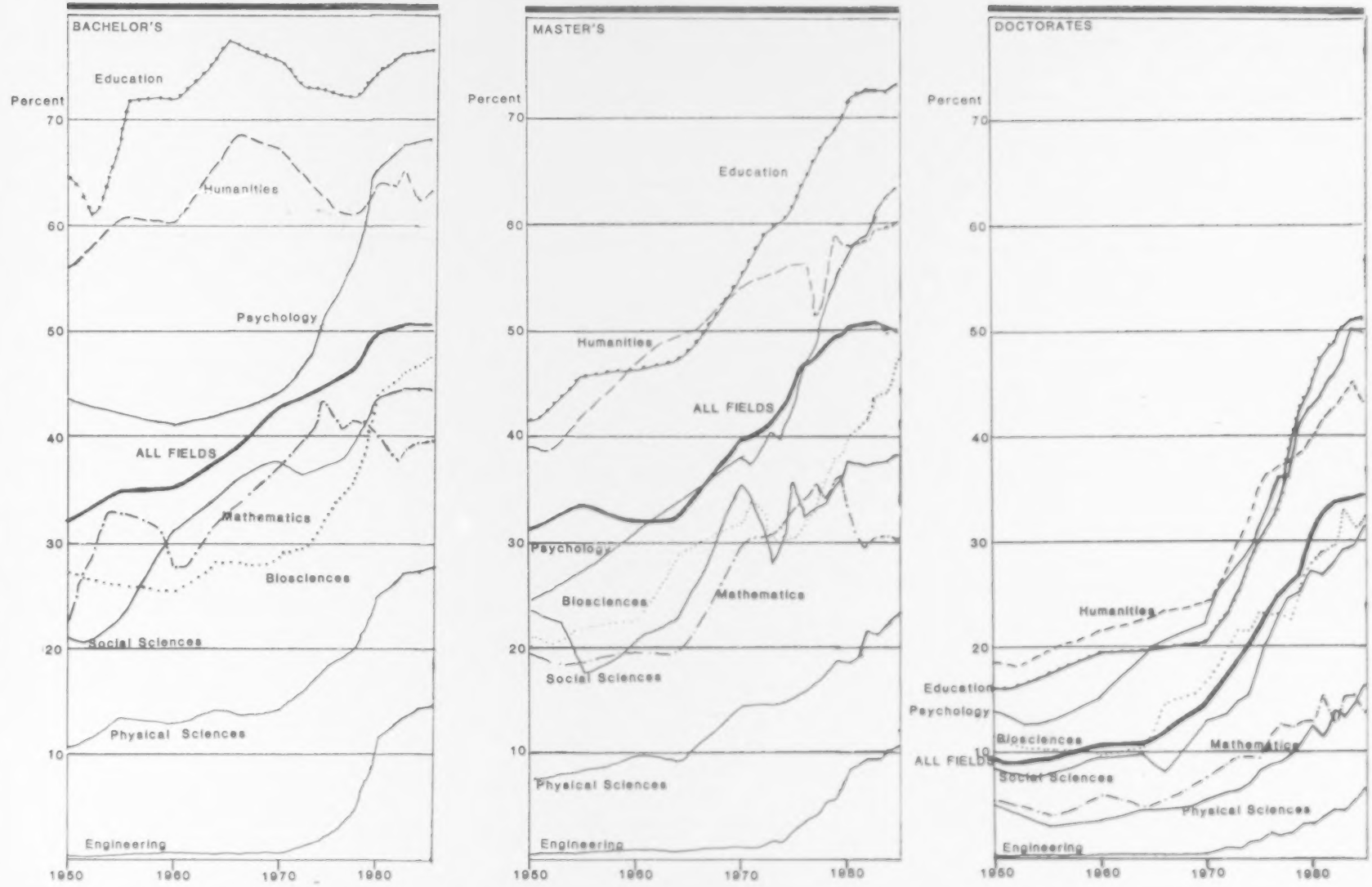
| SOURCE OF SUPPORT | FISCAL YEAR 1974 | | | | FISCAL YEAR 1978 | | | | FISCAL YEAR 1982 | | | | FISCAL YEAR 1984 | | | | FISCAL YEAR 1985 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MEN | % | WOMEN | % | MEN | % | WOMEN | % | MEN | % | WOMEN | % | MEN | % | WOMEN | % | MEN | % | WOMEN | % |
| FEDERAL SUPPORT | | | | | | | | | | | | | | | | | | | | |
| NSF Fellowship | 1,305 | 5.3 | 206 | 3.5 | 586 | 2.7 | 139 | 1.8 | 496 | 2.5 | 135 | 1.4 | 422 | 2.2 | 168 | 1.7 | 393 | 2.1 | 161 | 1.6 |
| NSF Traineeship | 1,241 | 5.0 | 191 | 3.2 | 354 | 1.7 | 68 | 0.9 | 139 | 0.7 | 41 | 0.4 | | | | | | | | |
| NIH Fellowship | 663 | 2.7 | 270 | 4.6 | 369 | 1.7 | 193 | 2.5 | 313 | 1.6 | 199 | 2.1 | | | | | | | | |
| NIH Traineeship | 1,233 | 5.0 | 441 | 7.5 | 1,068 | 5.0 | 473 | 6.1 | 906 | 4.6 | 546 | 5.7 | 1,045 | 5.4 | 688 | 6.8 | 919 | 4.8 | 651 | 6.5 |
| NDEA Fellowship | 2,789 | 11.3 | 707 | 12.0 | 738 | 3.5 | 315 | 4.0 | 181 | 0.9 | 110 | 1.2 | | | | | | | | |
| National Direct Student Loan[1] | | | | | 1,789 | 8.4 | 650 | 8.3 | 2,390 | 12.2 | 1,436 | 15.1 | 1,443 | 7.5 | 1,035 | 10.2 | | | | |
| Other HEW/HHS[2] | | | | | 575 | 2.7 | 423 | 5.4 | 460 | 2.3 | 442 | 4.7 | 223 | 1.2 | 277 | 2.7 | 193 | 1.0 | 296 | 2.9 |
| Other Ed Dept | | | | | | | | | | | | | 163 | 0.8 | 142 | 1.4 | 195 | 1.0 | 137 | 1.4 |
| Grad/Prof. Opp Program | | | | | | | | | 33 | 0.2 | 43 | 0.5 | 51 | 0.3 | 45 | 0.4 | 95 | 0.5 | 96 | 1.0 |
| NASA Traineeship | 324 | 1.3 | 22 | 0.4 | 57 | 0.3 | 8 | 0.1 | | | | | | | | | | | | |
| GI Bill | 3,263 | 13.2 | 22 | 0.4 | 2,657 | 12.5 | 50 | 0.6 | 1,421 | 7.2 | 53 | 0.6 | 1,120 | 5.8 | 89 | 0.9 | 924 | 4.8 | 66 | 0.7 |
| Other Federal Support[3] | 2,631 | 10.7 | 702 | 11.9 | 1,159 | 5.4 | 341 | 4.4 | 1,101 | 5.6 | 443 | 4.6 | 891 | 4.6 | 489 | 4.8 | 728 | 3.8 | 366 | 3.6 |
| NATIONAL FELLOWSHIPS[4] | | | | | | | | | 563 | 2.9 | 383 | 4.0 | 777 | 4.0 | 616 | 6.1 | 638 | 3.3 | 507 | 5.0 |
| INSTITUTIONAL FUNDS | | | | | | | | | | | | | | | | | | | | |
| University Fellowship | 4,680 | 18.9 | 1,360 | 23.1 | 3,844 | 18.0 | 1,422 | 18.2 | 3,651 | 18.6 | 1,853 | 19.5 | 3,878 | 20.1 | 2,086 | 20.6 | 3,956 | 20.7 | 2,154 | 21.3 |
| Teaching Assistantship | 12,326 | 49.8 | 2,786 | 47.3 | 9,833 | 46.1 | 3,360 | 43.1 | 9,317 | 47.4 | 4,063 | 42.8 | 9,432 | 48.8 | 4487 | 44.3 | 9,330 | 48.7 | 4,463 | 44.2 |
| Research Assistantship | 9,079 | 36.7 | 1,421 | 24.1 | 8,249 | 38.7 | 1,957 | 25.1 | 8,329 | 42.4 | 2,683 | 28.3 | 8,865 | 45.9 | 3,115 | 30.7 | 9,014 | 47.1 | 3,193 | 31.6 |
| Ed. Funds, Industry | 979 | 4.0 | 108 | 1.8 | 632 | 3.0 | 142 | 1.8 | 735 | 3.7 | 219 | 2.3 | 907 | 4.7 | 414 | 4.1 | 1,031 | 5.4 | 488 | 4.8 |
| Other Univ. Related | 2,163 | 8.7 | 701 | 11.9 | 1,453 | 6.8 | 678 | 8.7 | 1,430 | 7.3 | 892 | 9.4 | 1,124 | 5.8 | 938 | 9.3 | 1,087 | 5.7 | 911 | 9.0 |
| College Work/Study | | | | | | | | | | | | | 586 | 3.0 | 421 | 4.2 | 770 | 4.0 | 441 | 4.4 |
| PERSONAL FUNDS | | | | | | | | | | | | | | | | | | | | |
| Own Earnings | 9,678 | 39.1 | 2,529 | 42.9 | 10,310 | 48.4 | 4,489 | 57.6 | 9,698 | 49.3 | 5,724 | 60.3 | 10,953 | 56.7 | 6,861 | 67.7 | 10,925 | 57.1 | 6,840 | 67.8 |
| Spouse's Earnings | 4,948 | 20.0 | 1,232 | 20.9 | 6,411 | 30.1 | 2,590 | 33.2 | 5,459 | 27.8 | 3,235 | 34.1 | 5,651 | 29.2 | 3,558 | 35.1 | 5,578 | 29.1 | 3,592 | 35.6 |
| Family Contributions | 1,632 | 6.6 | 495 | 8.4 | 2,876 | 13.5 | 1,215 | 15.6 | 3,432 | 17.5 | 1,698 | 17.9 | 4,417 | 22.9 | 2,332 | 23.0 | 4,734 | 24.7 | 2,336 | 23.2 |
| Borrowings[5] | 3,308 | 13.4 | 703 | 11.9 | 1,995 | 9.4 | 799 | 10.2 | 2,247 | 11.4 | 1,297 | 13.7 | 4,199 | 21.7 | 2,732 | 26.9 | 6,059 | 31.6 | 3,825 | 37.9 |
| Other | 1,282 | 5.2 | 331 | 5.6 | 1,550 | 7.3 | 537 | 6.9 | 1,545 | 7.9 | 584 | 6.1 | 1,440 | 7.5 | 563 | 5.6 | 1,367 | 7.1 | 488 | 5.8 |
| UNDUPLICATED TOTAL[6] | 24,761 | | 5,894 | | 21,323 | | 7,799 | | 19,664 | | 9,496 | | 19,327 | | 10,131 | | 19,147 | | 10,090 | |

[1] Includes ADAMHA Traineeships and Fellowships.
[2] Includes Title IV Language Area and Area Studies Fellowships.
[3] Includes AEC/ERDA Fellowships and NASA Traineeships which were formerly shown separately.
[4] Includes Woodrow Wilson Fellowships which were formerly shown separately.
[5] Includes Guaranteed Student Loans and Other Loans.
[6] Ph.D.s who did not report sources of support are omitted from the table.

SOURCE: Series of Earned Degrees, USOE and Summary Report, Doctorate Recipients from United States Universities, 1971-85, National Research Council

TABLE 2-9

PERCENT OF DEGREES GRANTED TO WOMEN 1950 - 1985



SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 2-10

## EARNED DEGREES CONFERRED IN THE U.S. BY LEVEL AND SEX, 1869-70 - 1986-87

| Year | Bachelor's degrees | | | Master's degrees | | | First-professional degrees | | | Doctor's degrees | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1869-70 | [1]9,371 | [1]7,993 | [1]1,378 | 0 | 0 | 0 | [2] | [2] | [2] | 1 | 1 | 0 |
| 1879-80 | [1]12,896 | [1]10,411 | [1]2,485 | 879 | 868 | 11 | [2] | [2] | [2] | 54 | 51 | 3 |
| 1889-90 | [1]15,539 | [1]12,857 | [1]2,682 | 1,015 | 821 | 194 | [2] | [2] | [2] | 149 | 147 | 2 |
| 1899-1900 | [1]27,410 | [1]22,173 | [1]5,237 | 1,583 | 1,280 | 303 | [2] | [2] | [2] | 382 | 359 | 23 |
| 1909-10 | [1]37,199 | [1]28,762 | [1]8,437 | 2,113 | 1,555 | 558 | [2] | [2] | [2] | 443 | 399 | 44 |
| 1919-20 | [1]48,622 | [1]31,980 | [1]16,642 | 4,279 | 2,985 | 1,294 | [2] | [2] | [2] | 615 | 522 | 93 |
| 1929-30 | [1]122,484 | [1]73,615 | [1]48,869 | 14,969 | 8,925 | 6,044 | [2] | [2] | [2] | 2,299 | 1,946 | 353 |
| 1939-40 | [1]186,500 | [1]109,546 | [1]76,954 | 26,731 | 16,508 | 10,223 | [2] | [2] | [2] | 3,290 | 2,861 | 429 |
| 1949-50 | [1]432,058 | [1]328,841 | [1]103,217 | 58,183 | 41,220 | 16,963 | [2] | [2] | [2] | 6,420 | 5,804 | 616 |
| 1959-60 | [1]392,440 | [1]254,063 | [1]138,377 | 74,435 | 50,898 | 23,537 | [2] | [2] | [2] | 9,829 | 8,801 | 1,028 |
| 1960-61 | 369,995 | 228,500 | 141,495 | 81,690 | 55,267 | 26,423 | 25,253 | 24,577 | 676 | 10,575 | 9,463 | 1,112 |
| 1961-62 | 388,680 | 234,671 | 154,009 | 88,414 | 59,710 | 28,704 | 25,607 | 24,836 | 771 | 11,622 | 10,377 | 1,245 |
| 1962-63 | 416,928 | 246,129 | 170,799 | 95,470 | 64,198 | 31,272 | 26,590 | 25,753 | 837 | 12,822 | 11,448 | 1,374 |
| 1963-64 | 466,944 | 270,319 | 196,625 | 105,551 | 70,339 | 35,212 | 27,209 | 26,357 | 852 | 14,490 | 12,955 | 1,535 |
| 1964-65 | 501,713 | 289,003 | 212,710 | 117,152 | 77,544 | 39,608 | 28,290 | 27,283 | 1,007 | 16,467 | 14,692 | 1,775 |
| 1965-66 | 520,923 | 299,871 | 221,052 | 140,548 | 93,063 | 47,485 | 30,124 | 28,982 | 1,142 | 18,237 | 16,121 | 2,116 |
| 1966-67 | 558,852 | 322,946 | 235,904 | 157,707 | 103,092 | 54,615 | 31,695 | 30,401 | 1,294 | 20,617 | 18,163 | 2,454 |
| 1967-68 | 632,758 | 358,105 | 274,653 | 176,749 | 113,519 | 63,230 | 33,939 | 32,402 | 1,537 | 23,089 | 20,183 | 2,906 |
| 1968-69 | 729,071 | 410,785 | 318,286 | 193,756 | 121,531 | 72,225 | 35,114 | 33,595 | 1,519 | 26,188 | 22,752 | 3,436 |
| 1969-70 | 792,656 | 451,380 | 341,276 | 208,291 | 125,624 | 82,667 | 34,578 | 32,794 | 1,784 | 29,866 | 25,890 | 3,976 |
| 1970-71 | 839,730 | 475,594 | 364,136 | 230,509 | 138,146 | 92,363 | 37,946 | 35,544 | 2,402 | 32,107 | 27,530 | 4,577 |
| 1971-72 | 887,273 | 500,690 | 386,683 | 251,633 | 149,550 | 102,083 | 43,411 | 40,723 | 2,688 | 33,363 | 28,090 | 5,273 |
| 1972-73 | 922,362 | 518,191 | 404,171 | 263,371 | 154,468 | 108,903 | 50,018 | 46,489 | 3,529 | 34,777 | 28,571 | 6,206 |
| 1973-74 | 945,776 | 527,313 | 418,463 | 277,033 | 157,842 | 119,191 | 53,816 | 48,530 | 5,286 | 33,816 | 27,365 | 6,451 |
| 1974-75 | 922,933 | 504,841 | 418,092 | 292,450 | 161,570 | 130,880 | 55,916 | 48,956 | 6,960 | 34,083 | 26,817 | 7,266 |
| 1975-76 | 925,746 | 504,925 | 420,821 | 311,771 | 167,248 | 144,523 | 62,649 | 52,892 | 9,757 | 34,064 | 26,267 | 7,797 |
| 1976-77 | 919,549 | 495,545 | 424,004 | 317,164 | 167,783 | 149,381 | 64,359 | 52,374 | 11,985 | 33,232 | 25,142 | 8,090 |
| 1977-78 | 921,204 | 487,347 | 433,857 | 311,620 | 161,212 | 150,408 | 66,581 | 52,270 | 14,311 | 32,131 | 23,658 | 8,473 |
| 1978-79 | 921,390 | 477,344 | 444,046 | 301,079 | 153,370 | 147,709 | 68,848 | 52,652 | 16,196 | 32,730 | 23,541 | 9,189 |
| 1979-80 | 929,417 | 473,611 | 455,806 | 298,081 | 150,749 | 147,332 | 70,131 | 52,716 | 17,415 | 32,615 | 22,943 | 9,672 |
| 1980-81 | 935,140 | 469,883 | 465,257 | 295,739 | 147,043 | 148,696 | 71,956 | 52,792 | 19,164 | 32,958 | 22,711 | 10,247 |
| 1981-82 | 952,998 | 473,364 | 479,634 | 295,546 | 145,532 | 150,014 | 72,032 | 52,223 | 19,809 | 32,707 | 22,224 | 10,483 |
| 1982-83 | 969,510 | 479,140 | 490,370 | 289,921 | 144,697 | 145,224 | 73,136 | 51,310 | 21,826 | 32,775 | 21,902 | 10,873 |
| 1983-84 | 974,309 | 482,319 | 491,990 | 284,263 | 143,595 | 140,668 | 74,407 | 51,334 | 23,073 | 33,209 | 22,064 | 11,145 |
| 1984-85 | 979,477 | 482,528 | 496,949 | 286,251 | 143,390 | 142,861 | 75,063 | 50,455 | 24,608 | 32,943 | 21,700 | 11,243 |
| 1985-86* | 979,000 | 483,000 | 496,000 | 285,000 | 142,000 | 143,000 | 75,400 | 50,400 | 25,000 | 32,800 | 21,200 | 11,600 |
| 1986-87* | 978,000 | 480,000 | 498,000 | 286,000 | 142,000 | 144,000 | 75,600 | 50,300 | 25,300 | 32,700 | 20,800 | 11,900 |

*Estimated

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined by National Science Foundation

## TABLE 2-11

### DOCTORATE DEGREES AWARDED BY U.S. INSTITUTIONS BY SCIENCE/ENGINEERING FIELD AND SEX, 1950-1986

| | All Fields | | | Science/Engineering Fields: Total S/E | | | | Physical Sciences | | | Engineering | | | Math/Comp Sci | | | Life Sciences | | | Psychology | | | Social Sciences | | | All Other Fields | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Total | Women | %W | Number | %T | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W |
| 1950 | 6633 | 643 | 10 | 3890 | 59 | 244 | 6 | 1498 | 49 | 3 | 417 | 1 | 0.2 | 160 | 9 | 6 | 1033 | 95 | 9 | 283 | 42 | 15 | 499 | 48 | 10 | 2743 | 399 | 15 |
| 1951 | 7338 | 674 | 9 | 4618 | 62 | 291 | 6 | 1681 | 64 | 4 | 520 | 1 | 0.2 | 184 | 9 | 5 | 1192 | 102 | 9 | 425 | 57 | 13 | 616 | 58 | 9 | 2720 | 383 | 14 |
| 1952 | 7683 | 714 | 9 | 4783 | 62 | 294 | 6 | 1720 | 57 | 3 | 529 | 3 | 0.6 | 206 | 11 | 5 | 1157 | 94 | 8 | 540 | 72 | 14 | 601 | 56 | 9 | 2900 | 420 | 14 |
| 1953 | 8309 | 792 | 10 | 5114 | 62 | 322 | 6 | 1714 | 62 | 4 | 515 | 1 | 0.2 | 241 | 14 | 6 | 1443 | 123 | 9 | 583 | 79 | 14 | 618 | 43 | 7 | 3195 | 470 | 15 |
| 1954 | 8996 | 815 | 9 | 5433 | 60 | 310 | 6 | 1686 | 67 | 4 | 594 | 0 | 0.0 | 227 | 14 | 6 | 1528 | 111 | 7 | 619 | 66 | 11 | 679 | 58 | 9 | 3563 | 505 | 14 |
| 1955 | 8840 | 879 | 9 | 5436 | 61 | 302 | 6 | 1717 | 52 | 3 | 599 | 0 | 0.0 | 250 | 11 | 4 | 1505 | 107 | 7 | 688 | 84 | 12 | 681 | 48 | 7 | 3404 | 524 | 15 |
| 1956 | 8903 | 885 | 10 | 5327 | 60 | 349 | 7 | 1667 | 68 | 4 | 610 | 0 | 0.0 | 235 | 10 | 4 | 1404 | 123 | 9 | 634 | 86 | 14 | 777 | 62 | 8 | 3576 | 536 | 15 |
| 1957 | 8756 | 938 | 11 | 5233 | 60 | 345 | 7 | 1674 | 71 | 4 | 596 | 1 | 0.2 | 249 | 13 | 5 | 1449 | 122 | 8 | 550 | 90 | 16 | 715 | 48 | 7 | 3523 | 594 | 17 |
| 1958 | 8942 | 964 | 11 | 5353 | 60 | 378 | 7 | 1655 | 66 | 4 | 647 | 4 | 0.6 | 247 | 15 | 6 | 1465 | 144 | 10 | 572 | 84 | 15 | 767 | 65 | 8 | 3589 | 586 | 16 |
| 1959 | 9360 | 989 | 11 | 5635 | 60 | 376 | 7 | 1812 | 69 | 4 | 714 | 1 | 0.1 | 282 | 15 | 5 | 1427 | 120 | 8 | 625 | 98 | 15 | 765 | 73 | 10 | 3725 | 613 | 16 |
| 50-59 | 83,760 | 8,241 | 10 | 50,822 | 61 | 3,211 | 6 | 16,820 | 619 | 4 | 5,744 | 12 | 0.2 | 2,281 | 121 | 5 | 13,733 | 1,141 | 8 | 5,529 | 759 | 14 | 6,715 | 559 | 8 | 32,938 | 5,030 | 15 |
| 1960 | 9829 | 1028 | 10 | 6056 | 62 | 382 | 6 | 1838 | 62 | 3 | 786 | 3 | 0.4 | 303 | 18 | 6 | 1647 | 126 | 8 | 641 | 97 | 15 | 940 | 76 | 9 | 3773 | 646 | 17 |
| 1961 | 10575 | 1112 | 11 | 6531 | 62 | 449 | 7 | 1991 | 70 | 4 | 943 | 6 | 0.6 | 344 | 17 | 5 | 1646 | 144 | 9 | 703 | 136 | 19 | 904 | 76 | 8 | 4044 | 663 | 16 |
| 1962 | 11622 | 1245 | 11 | 7249 | 62 | 501 | 7 | 2132 | 87 | 4 | 1207 | 4 | 0.3 | 396 | 24 | 6 | 1804 | 161 | 9 | 781 | 149 | 19 | 939 | 76 | 8 | 4373 | 744 | 17 |
| 1963 | 12822 | 1374 | 11 | 8055 | 63 | 573 | 7 | 2380 | 95 | 4 | 1378 | 11 | 0.8 | 490 | 36 | 7 | 1908 | 184 | 10 | 844 | 144 | 17 | 1055 | 103 | 10 | 4767 | 801 | 17 |
| 1964 | 14490 | 1535 | 11 | 9025 | 62 | 632 | 7 | 2455 | 117 | 5 | 1693 | 7 | 0.4 | 596 | 29 | 5 | 2181 | 203 | 9 | 939 | 182 | 19 | 1161 | 98 | 8 | 5465 | 903 | 17 |
| 1965 | 16467 | 1775 | 11 | 10252 | 62 | 709 | 7 | 2829 | 127 | 4 | 2124 | 10 | 0.5 | 688 | 60 | 9 | 2474 | 246 | 10 | 847 | 159 | 19 | 1290 | 107 | 8 | 6215 | 1066 | 17 |
| 1966 | 18239 | 2118 | 12 | 11298 | 62 | 875 | 8 | 3045 | 131 | 4 | 2304 | 9 | 0.4 | 801 | 57 | 7 | 2696 | 316 | 12 | 1046 | 220 | 21 | 1406 | 144 | 10 | 6941 | 1243 | 18 |
| 1967 | 20621 | 2457 | 12 | 12759 | 62 | 1013 | 8 | 3462 | 162 | 5 | 2614 | 11 | 0.4 | 870 | 60 | 7 | 2900 | 354 | 12 | 1231 | 232 | 19 | 1682 | 194 | 12 | 7862 | 1444 | 18 |
| 1968 | 23091 | 2906 | 13 | 14128 | 61 | 1204 | 9 | 3593 | 188 | 5 | 2832 | 12 | 0.4 | 983 | 51 | 5 | 3445 | 452 | 13 | 1268 | 286 | 23 | 1907 | 214 | 11 | 8963 | 1702 | 19 |
| 1969 | 26189 | 3436 | 13 | 15839 | 60 | 1375 | 9 | 3859 | 206 | 5 | 3377 | 12 | 0.4 | 1161 | 70 | 6 | 3374 | 484 | 13 | 1551 | 356 | 23 | 2112 | 247 | 12 | 10350 | 2061 | 20 |
| 60-69 | 163,945 | 18,986 | 12 | 101,192 | 62 | 7,713 | 8 | 27,574 | 1,241 | 5 | 19,358 | 85 | 0.4 | 6,632 | 423 | 6 | 24,487 | 2,668 | 11 | 9,851 | 1,961 | 20 | 13,297 | 1,335 | 10 | 62,753 | 11,273 | 18 |
| 1970 | 29872 | 3980 | 13 | 17639 | 59 | 1527 | 9 | 4217 | 236 | 5 | 3681 | 24 | 0.7 | 1343 | 98 | 7 | 4171 | 499 | 12 | 1668 | 372 | 22 | 2503 | 298 | 12 | 12233 | 2453 | 20 |
| 1971 | 32113 | 4579 | 14 | 18466 | 58 | 1800 | 10 | 4391 | 268 | 6 | 3654 | 23 | 0.6 | 1327 | 96 | 7 | 4534 | 624 | 14 | 1782 | 427 | 24 | 2778 | 384 | 14 | 13647 | 2779 | 20 |
| 1972 | 33369 | 5374 | 16 | 18422 | 55 | 2010 | 11 | 4103 | 273 | 7 | 3706 | 25 | 0.7 | 1295 | 101 | 8 | 4478 | 647 | 14 | 1881 | 467 | 25 | 2951 | 397 | 13 | 14957 | 3364 | 22 |
| 1973 | 34790 | 6215 | 18 | 18599 | 53 | 2288 | 12 | 4036 | 274 | [illegible] | 3360 | 64 | 1.8 | 1264 | 117 | 9 | 4524 | 734 | 16 | 2089 | 605 | 29 | 3145 | 496 | 16 | 16192 | 3927 | 24 |
| 1974 | 33824 | 6450 | 19 | 17863 | 53 | 2417 | 14 | 3632 | 292 | [illegible] | 3336 | 55 | 1.6 | 1329 | 109 | 9 | 4230 | 752 | 17 | 2339 | 691 | 30 | 3110 | 572 | 18 | 15961 | 4040 | 25 |
| 1975 | 34084 | 7263 | 21 | 17784 | 52 | 2633 | 15 | 3618 | 302 | 8 | 3151 | 67 | 2.1 | 1188 | 124 | 10 | 4257 | 782 | 18 | 2442 | 756 | 31 | 3123 | 608 | 19 | 16302 | 4630 | 28 |
| 1976 | 34076 | 7805 | 23 | 17288 | 51 | 2786 | 16 | 3433 | 306 | 9 | 2835 | 69 | 2.4 | 1100 | 117 | 11 | 4202 | 791 | 19 | 2581 | 829 | 32 | 3136 | 690 | 22 | 16788 | 5017 | 30 |
| 1977 | 33244 | 8094 | 24 | 16937 | 51 | 2958 | 17 | 3344 | 330 | 10 | 2599 | 74 | 2.8 | 1019 | 128 | 13 | 4199 | 791 | 19 | 2761 | 991 | 36 | 2995 | 654 | 22 | 16307 | 5136 | 31 |
| 1978 | 32156 | 8487 | 26 | 16196 | 50 | 3039 | 19 | 3177 | 313 | 10 | 2442 | 53 | 2.2 | 1021 | 139 | 14 | 4179 | 872 | 21 | 2597 | 971 | 37 | 2840 | 688 | 24 | 15960 | 5448 | 34 |
| 1979 | 32730 | 9202 | 28 | 16341 | 50 | 3310 | 20 | 3324 | 350 | 11 | 2517 | 93 | 3.3 | 966 | 152 | 16 | 4403 | 974 | 22 | 2674 | 1071 | 40 | 2697 | 680 | 25 | 16393 | 5891 | 36 |
| 70-79 | 333,288 | 67,352 | 20 | 178,548 | 53 | 24,667 | 14 | 35,100 | 2,866 | 8 | 31,479 | 541 | 1.7 | 11,752 | 1,181 | 10 | 43,127 | 7,446 | 17 | 22,814 | 7,168 | 31 | 29,280 | 5,465 | 19 | 154,740 | 42,685 | 28 |
| 1980 | 32632 | 9662 | 30 | 16483 | 51 | 3543 | 21 | 3095 | 326 | 12 | 2524 | 96 | 3.8 | 964 | 117 | 13 | 4495 | 1050 | 23 | 2775 | 1171 | 42 | 2635 | 713 | 27 | 16149 | 6139 | 38 |
| 1981 | 32958 | 10247 | 31 | 16935 | 51 | 3774 | 22 | 3141 | 376 | 12 | 2551 | 104 | 4.1 | 980 | 79 | 14 | 4669 | 1168 | 25 | 2955 | 1274 | 43 | 2639 | 693 | 26 | 16023 | 6493 | 41 |
| 1982 | 32647 | 10423 | 32 | 16862 | 52 | 3890 | 23 | 3084 | 451 | 14 | 2621 | 138 | 5.3 | 932 | 115 | 12 | 4693 | 1232 | 26 | 2780 | 1262 | 45 | 2550 | 691 | 27 | 15785 | 6533 | 41 |
| 1983 | 32775 | 10875 | 33 | 17016 | 52 | 4174 | 25 | 3269 | 458 | 14 | 2822 | 125 | 4.4 | 960 | 150 | 16 | 4350 | 1204 | 28 | 3108 | 1487 | 48 | 2507 | 750 | 30 | 15759 | 6701 | 43 |
| 1984 | 33209 | 11155 | 34 | 17117 | 52 | 4216 | 25 | 3298 | 489 | 15 | 2479 | 165 | 5.5 | 946 | 152 | 16 | 4448 | 1195 | 27 | 2973 | 1456 | 49 | 2473 | 759 | 31 | 16092 | 6939 | 43 |
| 1985 | 32943 | 11234 | 34 | 17425 | 53 | 4379 | 25 | 3390 | 552 | 16 | 3221 | 207 | 6.4 | 947 | 134 | 14 | 4489 | 1278 | 28 | 2908 | 1416 | 49 | 2470 | 792 | 32 | 15518 | 6855 | 44 |
| 1986 | 33653 | 12936 | 35 | 18073 | 54 | 4471 | 26 | 3351 | 588 | 17 | 3400 | 228 | 6.7 | 1086 | 169 | 16 | 4352 | 1046 | 24 | 3088 | 1591 | 52 | 2596 | 849 | 33 | 15580 | 5363 | 34 |
| 80-86 | 230,817 | 75,488 | 33 | 119,911 | 52 | 30,457 | 25 | 23,038 | 3,280 | 14 | 20,115 | 1,063 | 5 | 6,815 | 986 | 14 | 31,496 | 10,174 | 32 | 20,587 | 9,657 | 47 | 17,870 | 5,247 | 29 | 110,906 | 45,033 | 41 |
| Total | 809,810 | 170,024 | 21 | 447,473 | 55 | 66,078 | 15 | 104,524 | 8,026 | 8 | 76,694 | 1,701 | 2.2 | 27,480 | 2,711 | 10 | 112,837 | 21,429 | 19 | 58,781 | 19,545 | 33 | 67,162 | 12,606 | 19 | 361,337 | 104,011 | 29 |

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined by National Science Foundation

## TABLE 2-11 (continued)

MASTERS DEGREES AWARDED BY U.S. INSTITUTIONS BY SCIENCE/ENGINEERING FIELD AND SEX, 1950-1986

| | | | | Science/Engineering Fields | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All Fields | | | Total S/E | | | | Physical Sciences | | | Engineering | | | Math/Comp Sci | | | Life Sciences | | | Psychology | | | Social Sciences | | | All Other Fields | | |
| Year | Total | Women | %W | Number | %T | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W |
| 1950 | 58219 | 16982 | 29 | 16596 | 29 | 1856 | 11 | 3184 | 265 | 8 | 4496 | 15 | 0.3 | 974 | 190 | 20 | 4158 | 534 | 13 | 1316 | 368 | 28 | 2468 | 484 | 20 | 41623 | 15126 | 36 |
| 1951 | 65132 | 18901 | 29 | 17539 | 27 | 1715 | 10 | 3200 | 226 | 7 | 4825 | 10 | 0.2 | 1109 | 180 | 16 | 4417 | 527 | 12 | 1645 | 395 | 24 | 2343 | 375 | 16 | 47593 | 17188 | 36 |
| 1952 | 63471 | 19934 | 31 | 15564 | 24 | 1527 | 10 | 3054 | 224 | 7 | 4091 | 18 | 0.4 | 802 | 139 | 17 | 4184 | 467 | 11 | 1406 | 340 | 24 | 2007 | 339 | 17 | 47907 | 18407 | 38 |
| 1953 | 61003 | 20034 | 33 | 13548 | 22 | 1290 | 10 | 2711 | 164 | 6 | 3566 | 13 | 0.4 | 677 | 112 | 17 | 3568 | 410 | 11 | 1161 | 265 | 23 | 1865 | 326 | 17 | 47475 | 18744 | 39 |
| 1954 | 56822 | 18676 | 33 | 13799 | 24 | 1352 | 10 | 2374 | 177 | 7 | 4204 | 15 | 0.4 | 706 | 127 | 18 | 3007 | 358 | 12 | 1254 | 369 | 29 | 1854 | 306 | 17 | 43424 | 17324 | 40 |
| 1955 | 60204 | 19464 | 33 | 13989 | 24 | 1563 | 11 | 2544 | 207 | 8 | 4484 | 13 | 0.3 | 761 | 148 | 19 | 3090 | 433 | 14 | 1295 | 417 | 32 | 1817 | 345 | 19 | 44215 | 17901 | 40 |
| 1956 | 59294 | 19897 | 34 | 14261 | 24 | 1438 | 10 | 2655 | 220 | 8 | 4724 | 19 | 0.4 | 898 | 179 | 20 | 2867 | 406 | 14 | 973 | 283 | 29 | 1944 | 331 | 17 | 45233 | 18459 | 41 |
| 1957 | 61955 | 20621 | 33 | 15205 | 25 | 1573 | 10 | 2704 | 221 | 8 | 5033 | 16 | 0.3 | 965 | 188 | 19 | 3019 | 403 | 13 | 1095 | 332 | 30 | 2189 | 413 | 19 | 46750 | 19050 | 41 |
| 1958 | 65614 | 21762 | 33 | 16842 | 26 | 1779 | 11 | 3004 | 271 | 9 | 5788 | 20 | 0.3 | 1234 | 240 | 19 | 3179 | 458 | 14 | 1235 | 399 | 32 | 2370 | 391 | 16 | 48774 | 19583 | 40 |
| 1959 | 69584 | 22176 | 32 | 18682 | 27 | 1976 | 11 | 3179 | 270 | 8 | 6753 | 24 | 0.4 | 1499 | 311 | 21 | 3537 | 561 | 16 | 1254 | 397 | 32 | 2460 | 413 | 17 | 50902 | 20200 | 40 |
| 50-59 | 619,319 | 198,049 | 32 | 155,403 | 25 | 16,067 | 10 | 28,639 | 2,245 | 8 | 48,164 | 163 | 0.3 | 9,625 | 1,814 | 19 | 35,026 | 4,557 | 13 | 12,632 | 3,565 | 28 | 21,317 | 3,723 | 17 | 463,916 | 181,982 | 39 |
| 1960 | 74497 | 23560 | 32 | 20012 | 27 | 2074 | 10 | 3387 | 327 | 10 | 7159 | 26 | 0.4 | 1765 | 337 | 19 | 3751 | 573 | 15 | 1406 | 425 | 30 | 2544 | 386 | 15 | 54485 | 21486 | 39 |
| 1961 | 78269 | 24111 | 31 | 22786 | 29 | 2464 | 11 | 3799 | 345 | 9 | 8178 | 28 | 0.3 | 2238 | 466 | 21 | 4085 | 670 | 16 | 1719 | 563 | 32 | 2767 | 412 | 15 | 55483 | 21647 | 39 |
| 1962 | 84389 | 26184 | 31 | 25146 | 30 | 2812 | 11 | 3929 | 385 | 10 | 8909 | 40 | 0.4 | 2680 | 501 | 19 | 4672 | 781 | 17 | 1832 | 563 | 31 | 3124 | 538 | 17 | 59743 | 23372 | 39 |
| 1963 | 91419 | 28474 | 31 | 27567 | 30 | 3194 | 12 | 4132 | 428 | 10 | 9635 | 32 | 0.3 | 3323 | 658 | 20 | 4718 | 894 | 19 | 1918 | 573 | 30 | 3641 | 609 | 17 | 64051 | 25280 | 39 |
| 1964 | 101122 | 32110 | 32 | 30271 | 30 | 3567 | 12 | 4567 | 410 | 9 | 10827 | 34 | 0.3 | 3603 | 689 | 19 | 5357 | 1084 | 20 | 2059 | 688 | 33 | 3858 | 662 | 17 | 70851 | 28543 | 40 |
| 1965 | 112199 | 35984 | 32 | 33835 | 30 | 4082 | 12 | 4918 | 513 | 10 | 12056 | 44 | 0.4 | 4294 | 812 | 19 | 5978 | 1162 | 19 | 2241 | 732 | 32 | 4348 | 819 | 19 | 78360 | 31902 | 41 |
| 1966 | 140772 | 47588 | 34 | 38083 | 27 | 4882 | 13 | 4992 | 528 | 11 | 13678 | 76 | 0.6 | 5010 | 1018 | 20 | 6666 | 1380 | 21 | 2530 | 850 | 34 | 5207 | 1030 | 20 | 102689 | 42706 | 42 |
| 1967 | 157892 | 54711 | 35 | 41800 | 26 | 5737 | 14 | 5412 | 553 | 10 | 13885 | 78 | 0.6 | 5733 | 1310 | 23 | 7465 | 1517 | 20 | 3138 | 1062 | 34 | 6167 | 1197 | 19 | 116092 | 48996 | 42 |
| 1968 | 177150 | 63401 | 36 | 45425 | 26 | 6510 | 14 | 5508 | 635 | 12 | 15188 | 99 | 0.7 | 6081 | 1361 | 22 | 8315 | 1864 | 22 | 3482 | 1159 | 33 | 6851 | 1394 | 20 | 131725 | 56889 | 43 |
| 1969 | 194414 | 72553 | 37 | 48425 | 25 | 7114 | 15 | 5911 | 668 | 11 | 15243 | 113 | 0.7 | 6735 | 1566 | 23 | 8809 | 2016 | 23 | 4013 | 1327 | 33 | 7714 | 1624 | 21 | 145989 | 65219 | 45 |
| 60-69 | 1,212,618 | 408,658 | 34 | 333,150 | 27 | 43,618 | 13 | 46,555 | 4,792 | 10 | 114,758 | 570 | 0.5 | 41,462 | 8,718 | 21 | 59,816 | 11,945 | 20 | 24,338 | 7,922 | 33 | 46,221 | 8,671 | 19 | 879,468 | 366,040 | 42 |
| 1970 | 209367 | 83241 | 40 | 49318 | 24 | 8577 | 17 | 5948 | 847 | 14 | 15597 | 172 | 1.1 | 7107 | 1809 | 25 | 8590 | 2216 | 26 | 4120 | 1566 | 38 | 7956 | 1967 | 25 | 160069 | 74664 | 47 |
| 1971 | 231486 | 92896 | 40 | 50624 | 22 | 8656 | 17 | 6186 | 853 | 13 | 16747 | 187 | 1.1 | 6789 | 1688 | 25 | 8320 | 2190 | 26 | 4438 | 1651 | 37 | 8344 | 2089 | 25 | 180862 | 84238 | 47 |
| 1972 | 253774 | 103489 | 41 | 53567 | 21 | 9457 | 18 | 6507 | 888 | 14 | 16802 | 161 | 1.7 | 7186 | 1777 | 25 | 8414 | 2327 | 28 | 5293 | 2033 | 38 | 9065 | 2251 | 25 | 199207 | 93132 | 47 |
| 1973 | 264525 | 109525 | 41 | 54234 | 21 | 9760 | 18 | 6274 | 847 | 14 | 16758 | 286 | 1.7 | 7146 | 1730 | 24 | 9080 | 2257 | 25 | 5882 | 2367 | 40 | 9094 | 2291 | 25 | 210291 | 99765 | 47 |
| 1974 | 278259 | 119915 | 43 | 54135 | 19 | 10645 | 19 | 6087 | 887 | 15 | 15593 | 362 | 2.4 | 7116 | 1793 | 25 | 9605 | 2410 | 25 | 6616 | 2630 | 40 | 9358 | 2463 | 26 | 224084 | 109370 | 49 |
| 1975 | 293651 | 131536 | 45 | 53852 | 18 | 11005 | 20 | 5830 | 848 | 15 | 15434 | 396 | 2.6 | 6637 | 1766 | 27 | 9618 | 2411 | 25 | 7104 | 3045 | 43 | 9229 | 2539 | 28 | 239799 | 120531 | 50 |
| 976 | 313001 | 145276 | 46 | 56747 | 17 | 12072 | 22 | 5485 | 825 | 15.0 | 16170 | 589 | 3.6 | 6466 | 1690 | 26 | 9823 | 2619 | 27 | 7859 | 3671 | 47 | 8944 | 2678 | 30 | 256254 | 133184 | 52 |
| 1977 | 318241 | 150051 | 47 | 56731 | 18 | 13154 | 23 | 5145 | 887 | 17.2 | 16889 | 733 | 4.3 | 6496 | 1766 | 27 | 10707 | 3011 | 28 | 8320 | 4004 | 48 | 8974 | 2755 | 31 | 261510 | 136877 | 52 |
| 1978 | 312816 | 151168 | 48 | 56237 | 18 | 13690 | 24 | 5576 | 961 | 17.2 | 17015 | 871 | 5.1 | 6421 | 1717 | 27 | 10711 | 3226 | 30 | 8194 | 4263 | 52 | 8320 | 2667 | 32 | 256579 | 137418 | 54 |
| 1979 | 302075 | 148303 | 49 | 54454 | 18 | 14240 | 26 | 5466 | 992 | 18.2 | 16193 | 990 | 6.1 | 6101 | 1632 | 27 | 10719 | 3460 | 32 | 8031 | 4343 | 54 | 7948 | 2623 | 33 | 247619 | 134263 | 54 |
| 70-79 | 2,376,219 | 1,234,900 | 44 | 537,941 | 19 | 111,058 | 21 | 58,702 | 8,870 | 15.0 | 162,398 | 4,869 | 3.0 | 67,465 | 17,368 | 26 | 96,087 | 26,107 | 27 | 65,857 | 29,573 | 45 | 87,232 | 24,321 | 28 | 2,238,274 | 1,123,442 | 50 |
| 1980 | 299045 | 147936 | 49 | 54391 | 18 | 14781 | 27 | 5215 | 975 | 18.6 | 16845 | 1190 | 7.1 | 6515 | 1800 | 28 | 10278 | 3326 | 32 | 7861 | 4464 | 57 | 7658 | 2628 | 34 | 244654 | 133553 | 55 |
| 1981 | 295759 | 148646 | 50 | 53710 | 18 | 14875 | 28 | 5094 | 1064 | 20.9 | 16386 | 1325 | 8.1 | 6785 | 1846 | 27 | 9682 | 3261 | 34 | 7998 | 4640 | 58 | 7575 | 2721 | 36 | 242049 | 133821 | 55 |
| 1982 | 295546 | 150014 | 51 | 55788 | 19 | 15769 | 28 | 5514 | 1196 | 21.7 | 17526 | 1573 | 9.0 | 7662 | 2216 | 29 | 9755 | 3472 | 36 | 7791 | 4582 | 59 | 7540 | 2729 | 36 | 239758 | 134246 | 56 |
| 1983 | 290021 | 145224 | 50 | 57610 | 20 | 16875 | 29 | 5237 | 1151 | 22.4 | 18830 | 1746 | 9.3 | 8158 | 2487 | 30 | 9654 | 3584 | 37 | 8378 | 5140 | 61 | 7533 | 2785 | 37 | 232191 | 128351 | 55 |
| 1984 | 284263 | 140668 | 49 | 58835 | 21 | 17394 | 30 | 5550 | 1304 | 23.5 | 20094 | 2096 | 10.4 | 8931 | 2761 | 31 | 8998 | 3454 | 38 | 8002 | 5041 | 63 | 7300 | 2740 | 38 | 225388 | 123272 | 55 |
| 1985 | 286251 | 142861 | 50 | 60588 | 21 | 18018 | 30 | 5782 | 1340 | 23.2 | 20926 | 2242 | 10.7 | 9483 | 3045 | 31 | 8455 | 3367 | 40 | 8408 | 5364 | 64 | 7034 | 2660 | 38 | 225663 | 124843 | 55 |
| 1986 | 288567 | 145059 | 50 | 62457 | 22 | 18871 | 30 | 5896 | 1329 | 22.5 | 21661 | 2493 | 11.5 | 11229 | 3524 | 31 | 8263 | 3387 | 41 | 8293 | 5370 | 65 | 7115 | 2768 | 39 | 226110 | 126188 | 56 |
| 80-86 | 2,039,482 | 1,030,458 | 50 | 403,619 | 20 | 116,184 | 29 | 38,536 | 8,359 | 22 | 132,269 | 12,663 | 9.6 | 59,263 | 17,679 | 30 | 65,085 | 23,851 | 37 | 56,731 | 34,601 | 61 | 51,755 | 19,031 | 37 | 1,635,843 | 904,274 | 55 |
| TOTAL | 6,647,634 | 2,861,665 | 43 | 1,430,133 | 22 | 285,927 | 20 | 172,432 | 24,216 | 14 | 457,789 | 18,265 | 4.0 | 177,815 | 45,579 | 26 | 256,014 | 66,460 | 26 | 159,558 | 75,661 | 47 | 206,525 | 55,746 | 27 | 5,217,501 | 2,575,738 | 49 |

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined by National Science Foundation

## TABLE 2-11 (continued)

BACHELORS DEGREES AWARDED BY U.S. INSTITUTIONS BY SCIENCE/ENGINEERING FIELD AND SEX, 1950-1986

| | All Fields | | | Science/Engineering Fields | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total S/E | | | Physical Sciences | | | Engineering | | | Math/Comp Sci | | | Life Sciences | | | Psychology | | | Social Sciences | | | All Other Fields | | |
| Year | Total | Women | %W | Number | %T | Women | Number | Women | %W | Number | Women | %W | Number | Women | %W | Number | Women | %W | Number | Women | %W | Number | Women | %W | Number | Women | %W |
| 1950 | 433734 | 103915 | 24 | 156933 | 36 | 18215 | 12 | 17725 | 1737 | 10 | 52246 | 175 | 0.3 | 6392 | 1466 | 23 | 39101 | 4928 | 13 | 9582 | 3524 | 37 | 29887 | 6405 | 21 | 276801 | 85700 | 31 |
| 1951 | 384352 | 105009 | 27 | 125957 | 33 | 16135 | 13 | 14296 | 1420 | 10 | 41473 | 87 | 0.2 | 5753 | 1462 | 25 | 32271 | 4253 | 13 | 7819 | 2983 | 38 | 24345 | 5950 | 24 | 258395 | 88874 | 34 |
| 1952 | 331924 | 104895 | 32 | 100611 | 30 | 15309 | 15 | 12145 | 1332 | 11 | 30549 | 60 | 0.2 | 4721 | 1332 | 28 | 25231 | 3805 | 15 | 6622 | 2839 | 43 | 21143 | 5941 | 28 | 231313 | 89586 | 39 |
| 1953 | 304857 | 104037 | 34 | 86142 | 28 | 14068 | 16 | 10414 | 1277 | 12 | 24189 | 37 | 0.2 | 4396 | 1274 | 29 | 21835 | 3475 | 16 | 5946 | 2516 | 42 | 19362 | 5489 | 28 | 218715 | 89969 | 41 |
| 1954 | 292880 | 105380 | 36 | 82376 | 28 | 14270 | 17 | 9880 | 1273 | 13 | 22329 | 65 | 0.3 | 4090 | 1368 | 33 | 21584 | 3505 | 16 | 5758 | 2673 | 46 | 18735 | 5386 | 29 | 210504 | 91110 | 43 |
| 1955 | 287601 | 103799 | 36 | 80901 | 28 | 13778 | 17 | 10516 | 1382 | 13 | 22589 | 62 | 0.3 | 4034 | 1310 | 32 | 19927 | 3250 | 16 | 5532 | 2523 | 46 | 18303 | 5251 | 29 | 206500 | 90021 | 44 |
| 1956 | 311298 | 111727 | 36 | 87720 | 28 | 14474 | 17 | 11672 | 1501 | 13 | 26312 | 76 | 0.3 | 4660 | 1523 | 33 | 19890 | 3382 | 17 | 5665 | 2557 | 45 | 19521 | 5435 | 28 | 223578 | 97253 | 43 |
| 1957 | 340367 | 117609 | 35 | 98509 | 29 | 15291 | 16 | 12934 | 1613 | 12 | 31211 | 81 | 0.3 | 5546 | 1720 | 31 | 21903 | 3576 | 16 | 6191 | 2666 | 43 | 20724 | 5635 | 27 | 241838 | 102318 | 42 |
| 1958 | 365748 | 122800 | 34 | 108727 | 30 | 15921 | 15 | 14352 | 1669 | 12 | 35332 | 109 | 0.3 | 6926 | 1971 | 28 | 23069 | 3670 | 16 | 6930 | 2867 | 41 | 22120 | 5635 | 25 | 257021 | 106879 | 42 |
| 1959 | 385151 | 130283 | 34 | 116802 | 30 | 17327 | 15 | 15460 | 1766 | 11 | 38134 | 121 | 0.3 | 9019 | 2515 | 28 | 23861 | 4127 | 17 | 7383 | 2906 | 39 | 22945 | 5892 | 26 | 268349 | 112956 | 42 |
| 50-59 | 3,437,692 | 1,109,454 | 32 | 1,042,478 | 30 | 156,788 | 15 | 129,394 | 14,970 | 12 | 326,366 | 873 | 0.3 | 55,535 | 15,901 | 29 | 248,672 | 37,971 | 15 | 67,628 | 28,056 | 42 | 217,085 | 57,019 | 26 | 2,395,214 | 954,666 | 40 |
| 1960 | 394889 | 139385 | 35 | 120937 | 31 | 19362 | 16 | 16057 | 2016 | 13 | 37808 | 145 | 0.4 | 11637 | 3125 | 27 | 24141 | 4491 | 19 | 8111 | 3326 | 41 | 23383 | 6259 | 27 | 273952 | 120023 | 44 |
| 1961 | 401784 | 145884 | 36 | 121660 | 30 | 20595 | 17 | 15500 | 2008 | 13 | 35866 | 136 | 0.4 | 13127 | 3644 | 28 | 23900 | 4822 | 20 | 8524 | 3431 | 40 | 24743 | 6556 | 26 | 280124 | 125289 | 45 |
| 1962 | 420685 | 158470 | 38 | 127469 | 30 | 23485 | 18 | 15896 | 2146 | 14 | 34735 | 125 | 0.4 | 14610 | 4255 | 29 | 25200 | 5670 | 22 | 9638 | 3821 | 40 | 27392 | 7668 | 28 | 293016 | 134985 | 46 |
| 1963 | 450592 | 175842 | 39 | 135964 | 30 | 27099 | 20 | 16276 | 2238 | 14 | 33458 | 130 | 0.4 | 16121 | 4958 | 31 | 27801 | 6174 | 22 | 11062 | 4557 | 41 | 31246 | 9042 | 29 | 314628 | 148743 | 47 |
| 1964 | 502104 | 202291 | 40 | 153361 | 31 | 32673 | 21 | 17527 | 2450 | 14 | 35226 | 159 | 0.5 | 18677 | 5995 | 32 | 31611 | 7213 | 23 | 13359 | 5516 | 41 | 36961 | 11160 | 30 | 348743 | 169818 | 49 |
| 1965 | 538930 | 219260 | 41 | 164936 | 31 | 36213 | 22 | 17916 | 2532 | 14 | 36795 | 139 | 0.4 | 19668 | 6453 | 33 | 34842 | 8277 | 24 | 16721 | 6033 | 41 | 40994 | 12779 | 31 | 373994 | 183047 | 49 |
| 1966 | 555613 | 224491 | 40 | 173471 | 31 | 39482 | 23 | 17186 | 2333 | 14 | 35815 | 146 | 0.4 | 20182 | 6702 | 33 | 36864 | 8464 | 23 | 17022 | 6981 | 41 | 46402 | 14856 | 32 | 382142 | 185009 | 48 |
| 1967 | 594862 | 239562 | 40 | 187849 | 32 | 44002 | 23 | 17794 | 2402 | 13 | 36188 | 184 | 0.5 | 21530 | 7334 | 34 | 39408 | 8948 | 23 | 19496 | 7806 | 40 | 53433 | 17328 | 32 | 407013 | 195560 | 48 |
| 1968 | 671591 | 278761 | 42 | 212174 | 32 | 53463 | 25 | 19442 | 2674 | 14 | 37616 | 211 | 0.6 | 24084 | 8841 | 37 | 43260 | 10091 | 23 | 23972 | 10166 | 42 | 63802 | 21502 | 34 | 459417 | 225298 | 49 |
| 1969 | 769683 | 322750 | 42 | 244519 | 32 | 63196 | 26 | 21591 | 2952 | 14 | 41553 | 313 | 0.8 | 28263 | 10348 | 37 | 48713 | 11308 | 23 | 29495 | 12719 | 43 | 74904 | 25556 | 34 | 525164 | 259554 | 49 |
| 60-69 | 5,300,533 | 2,106,696 | 40 | 1,642,340 | 31 | 359,370 | 22 | 175,183 | 23,751 | 14 | 365,058 | 1,686 | 0.5 | 187,699 | 61,655 | 33 | 335,760 | 75,258 | 22 | 155,400 | 64,334 | 41 | 423,260 | 132,686 | 31 | 3,658,193 | 1,747,326 | 48 |
| 1970 | 833322 | 346373 | 42 | 264122 | 32 | 68878 | 26 | 21551 | 2969 | 14 | 44772 | 338 | 0.8 | 29109 | 10516 | 36 | 52129 | 11875 | 23 | 33854 | 14741 | 44 | 82707 | 28439 | 34 | 569200 | 277495 | 49 |
| 1971 | 884386 | 370166 | 42 | 271176 | 31 | 72996 | 27 | 21549 | 3014 | 14 | 45387 | 365 | 0.8 | 27306 | 9818 | 36 | 51461 | 11803 | 23 | 38154 | 17037 | 45 | 87319 | 30459 | 35 | 613210 | 297170 | 48 |
| 1972 | 937884 | 393232 | 42 | 281228 | 30 | 77671 | 28 | 20887 | 3148 | 15 | 46003 | 501 | 1.1 | 27250 | 9784 | 36 | 53484 | 12694 | 24 | 43421 | 20154 | 46 | 90183 | 31390 | 35 | 656656 | 315561 | 48 |
| 1973 | 980707 | 412346 | 42 | 295391 | 30 | 83839 | 28 | 20809 | 3121 | 15 | 46989 | 580 | 1.2 | 27528 | 9985 | 36 | 59485 | 14570 | 24 | 48096 | 22986 | 48 | 92483 | 32597 | 35 | 685516 | 328507 | 48 |
| 1974 | 1008654 | 428843 | 43 | 305062 | 30 | 91793 | 30 | 21287 | 3536 | 17 | 43530 | 706 | 1.6 | 26570 | 9719 | 37 | 68226 | 17836 | 26 | 52256 | 26407 | 51 | 93193 | 33589 | 36 | 703592 | 337050 | 48 |
| 1975 | 987922 | 430268 | 44 | 294920 | 30 | 93342 | 32 | 20896 | 3838 | 18 | 40065 | 860 | 2.1 | 23385 | 8656 | 37 | 72710 | 20811 | 29 | 51436 | 27103 | 53 | 86428 | 32074 | 37 | 693002 | 336926 | 49 |
| 1976 | 997504 | 435765 | 44 | 292174 | 29 | 95597 | 33 | 21559 | 4139 | 19 | 39114 | 1443 | 3.7 | 21749 | 7678 | 35 | 77301 | 23789 | 31 | 50363 | 27376 | 54 | 82088 | 31172 | 38 | 705330 | 340148 | 48 |
| 1977 | 993008 | 441219 | 44 | 288543 | 29 | 97453 | 34 | 22618 | 4551 | 20 | 41581 | 2086 | 5.0 | 20729 | 7488 | 36 | 78472 | 25609 | 33 | 47794 | 27102 | 57 | 77349 | 30617 | 40 | 704465 | 343766 | 49 |
| 1978 | 997165 | 453546 | 45 | 288167 | 29 | 100060 | 35 | 23175 | 4987 | 22 | 47611 | 3497 | 7.4 | 19925 | 7110 | 36 | 77138 | 26954 | 35 | 45057 | 26540 | 59 | 75461 | 30972 | 41 | 708998 | 353486 | 50 |
| 1979 | 1000562 | 466259 | 47 | 288625 | 29 | 102292 | 35 | 23363 | 5287 | 23 | 53720 | 4919 | 9.2 | 20670 | 7421 | 36 | 75085 | 27548 | 37 | 43012 | 26363 | 61 | 72775 | 30754 | 42 | 711937 | 363967 | 51 |
| 70-79 | 9,621,114 | 4,177,997 | 43 | 2,869,408 | 30 | 883,921 | 31 | 217,694 | 38,590 | 18 | 468,572 | 15,295 | 3.4 | 244,221 | 88,175 | 36 | 665,492 | 193,489 | 29 | 453,443 | 235,809 | 52 | 839,986 | 312,563 | 37 | 6,751,706 | 3,294,076 | 49 |
| 1980 | 1010777 | 480039 | 47 | 291983 | 29 | 105976 | 36 | 23661 | 5651 | 24 | 59240 | 6014 | 10.2 | 22686 | 8247 | 36 | 71617 | 27596 | 39 | 42513 | 26923 | 63 | 72266 | 31563 | 44 | 718794 | 374065 | 52 |
| 1981 | 935140 | 463257 | 50 | 291204 | 31 | 106783 | 37 | 23952 | 5888 | 25 | 63287 | 7024 | 11.1 | 26199 | 9655 | 37 | 66832 | 26786 | 40 | 40833 | 26538 | 65 | 70101 | 30892 | 44 | 643936 | 358474 | 56 |
| 1982 | 952998 | 479634 | 50 | 298468 | 31 | 111473 | 37 | 24052 | 6186 | 26 | 67021 | 8231 | 12.3 | 31866 | 12055 | 38 | 63884 | 26282 | 41 | 41031 | 27408 | 67 | 70614 | 31311 | 44 | 654530 | 368161 | 56 |
| 1983 | 969504 | 490370 | 51 | 305866 | 32 | 114022 | 37 | 23234 | 6350 | 27 | 72248 | 9601 | 13.3 | 36963 | 14362 | 39 | 64119 | 25937 | 40 | 40364 | 27259 | 68 | 68938 | 30513 | 44 | 663638 | 376348 | 57 |
| 1984 | 974309 | 491990 | 50 | 308510 | 32 | 115358 | 37 | 23525 | 6487 | 28 | 75732 | 10668 | 14.1 | 45383 | 17771 | 39 | 55863 | 23766 | 43 | 39872 | 27080 | 68 | 68135 | 29586 | 43 | 665799 | 376632 | 57 |
| 1985 | 979477 | 496949 | 51 | 315951 | 32 | 118837 | 38 | 23597 | 6586 | 28 | 77154 | 11195 | 14.5 | 54024 | 21281 | 39 | 54248 | 23501 | 43 | 39811 | 27117 | 68 | 67117 | 29157 | 43 | 663526 | 378112 | 57 |
| 1986 | 987823 | 501900 | 51 | 318504 | 32 | 120566 | 38 | 21620 | 5927 | 27 | 76333 | 11049 | 14.5 | 58195 | 22567 | 39 | 53203 | 23316 | 44 | 40521 | 27943 | 69 | 68632 | 29786 | 43 | 669319 | 381334 | 57 |
| 80-86 | 6,810,028 | 3,406,139 | 50 | 2,130,486 | 31 | 793,013 | 37 | 163,641 | 43,075 | 26 | 491,015 | 63,782 | 13 | 275,316 | 105,918 | 38 | 429,766 | 177,182 | 41 | 284,945 | 190,268 | 67 | 485,803 | 212,788 | 44 | 4,679,542 | 2,613,126 | 56 |
| TOTAL | 25,169,367 | 10,800,286 | 43 | 7,684,712 | 31 | 2,191,092 | 29 | 685,912 | 120,386 | 18 | 1,629,009 | 81,636 | 5.0 | 762,771 | 271,649 | 36 | 1,679,670 | 483,900 | 29 | 961,216 | 518,465 | 54 | 1,966,134 | 715,056 | 36 | 17,484,655 | 8,609,194 | 49 |

SOURCE: Earned Degrees Conferred Series, 1971-72 through 1985-86, National Center for Education Statistics



## TABLE 2-12

PROPORTION OF BACHELOR'S AND MASTER'S DEGREES AWARDED TO WOMEN, BY FIELD, 1971-72 - 1985-86

| | 1971-72 | 1973-74 | 1975-76 | 1977-78 | 1978-79 | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **BACHELOR'S DEGREES** | | | | | | | | | | | |
| Agricultural & Nat. Resources | 5.5% | 9.7% | 18.3% | 24.6% | 27.1% | 30.8% | 31.3% | 32.6% | 31.6 | 31.1 | 31.4 |
| Architecture & Environ. Design | 12.0 | 14.8 | 19.2 | 23.7 | 25.8 | 28.1 | 29.8 | 34.8 | 35.8 | 35.5 | 36.1 |
| Area Studies | 52.5 | 54.3 | 55.5 | 59.7 | 58.2 | 60.1 | 64.0 | 63.0 | 58.9 | 61.7 | 60.7 |
| Biological/Life Sciences | 29.6 | 31.5 | 34.8 | 38.7 | 40.6 | 44.1 | 45.4 | 46.1 | 46.8 | 47.8 | 48.1 |
| Business & Management | 9.7 | 13.1 | 19.8 | 27.3 | 30.7 | 36.7 | 39.3 | 42.0 | 42.8 | 45.1 | 45.0 |
| Communications | 35.5 | 38.4 | 41.5 | 46.9 | 50.0 | 54.7 | 56.4 | 58.6 | 59.1 | 59.6 | 59.5 |
| Communications Technologies | | | | | | | | 47.4 | 44.7 | 46.7 | 46.7 |
| Computer & Inform. Science | 13.6 | 16.4 | 19.8 | 25.8 | 28.1 | 32.5 | 34.8 | 36.3 | 37.1 | 36.8 | 35.7 |
| Education | 74.1 | 73.5 | 72.8 | 72.5 | 73.2 | 75.0 | 75.9 | 75.8 | 76.0 | 75.9 | 75.9 |
| Engineering | 1.1 | 1.6 | 3.4 | 7.41 | 9.1 | 11.1 | 12.3 | 13.3 | 14.1 | 14.5 | 14.5 |
| Engineering Technologies | 0.8 | 1.4 | 2.1 | 28.0 | 3.5 | 5.8 | 6.7 | 8.0 | 7.8 | 7.7 | 7.8 |
| Fine & Applied Arts/Vis., Perf. Arts | 59.9 | 60.2 | 60.9 | 62.0 | 62.5 | 63.4 | 63.3 | 62.8 | 62.1 | 61.8 | 61.3 |
| Foreign Languages | 75.1 | 76.4 | 76.4 | 76.1 | 76.0 | 75.6 | 75.7 | 74.3 | 73.2 | 73.4 | 72.4 |
| Health Professions/Sciences | 75.7 | 77.4 | 78.8 | 80.6 | 82.0 | 83.5 | 84.1 | 84.2 | 84.3 | 84.8 | 85.0 |
| Home Economics | 96.5 | 96.4 | 95.9 | 95.6 | 95.1 | 95.0 | 94.3 | 94.3 | 93.8 | 93.5 | 93.1 |
| Law | 6.6 | 10.5 | 18.8 | 28.6 | 40.4 | 50.0 | 50.8 | 58.4 | 58.1 | 61.2 | 65.0 |
| Letters | 60.1 | 58.0 | 56.9 | 57.2 | 58.0 | 59.8 | 60.7 | 65.6 | 65.9 | 65.8 | 65.7 |
| Liberal/General Studies | | | | | | | | 54.1 | 53.7 | 55.3 | 55.1 |
| Library Science | 93.3 | 92.6 | 93.1 | 88.5 | 94.6 | 94.1 | 86.0 | 89.2 | 87.1 | 87.1 | 89.2 |
| Mathematics | 39.1 | 41.0 | 40.7 | 41.3 | 41.7 | 42.8 | 43.2 | 43.8 | 44.2 | 46.1 | 46.5 |
| Military Science | 0.0 | 0.3 | 0.2 | 2.3 | 3.5 | 3.9 | 7.4 | 10.9 | 8.2 | 8.7 | 8.2 |
| Parks, Recreation | | | | | | | | 63.0 | 62.8 | 62.1 | 62.5 |
| Philosophy/Religion | | | | | | | | 33.0 | 33.2 | 33.7 | 33.5 |
| Physical Sciences | 15.1 | 16.6 | 19.2 | 21.5 | 22.6 | 24.6 | 25.7 | 27.3 | 27.6 | 27.9 | 27.4 |
| Protective Services | | | | | | | | 39.5 | 38.3 | 38.5 | 37.3 |
| Psychology | 46.4 | 50.5 | 54.4 | 58.9 | 61.3 | 65.0 | 66.8 | 67.5 | 67.9 | 68.1 | 69.0 |
| Public Affairs & Services | 47.9 | 43.5 | 43.7 | 49.6 | 53.5 | 58.0 | 59.5 | 69.9 | 68.1 | 66.5 | 66.3 |
| Social Sciences | 36.3 | 36.6 | 37.9 | 40.6 | 42.0 | 44.2 | 44.7 | 44.6 | 44.1 | 44.1 | 43.8 |
| Theology | 27.8 | 28.1 | 27.3 | 24.1 | 25.6 | 25.4 | 25.6 | 27.1 | 26.2 | 27.1 | 26.3 |
| Interdisciplinary Studies | 31.1 | 37.1 | 45.0 | 47.3 | 49.9 | 51.0 | 52.1 | 49.6 | 50.9 | 52.2 | 52.2 |
| **ALL DISCIPLINES** | **43.7** | **44.4** | **45.6** | **47.2** | **48.3** | **49.8** | **50.3** | **50.6** | **50.5** | **50.7** | **50.8** |
| **MASTER'S DEGREES** | | | | | | | | | | | |
| Agricultural & Nat. Resources | 7.1 | 9.8 | 14.3 | 18.7 | 20.2 | 23.5 | 25.2 | 26.5 | 28.5 | 27.5 | 28.9 |
| Architecture & Environ. Design | 14.6 | 18.4 | 20.8 | 26.0 | 28.5 | 29.1 | 32.6 | 33.8 | 31.8 | 34.4 | 34.7 |
| Area Ethnic Studies | 40.7 | 38.9 | 45.3 | 47.8 | 49.0 | 51.6 | 49.3 | 50.2 | 47.9 | 47.2 | 46.9 |
| Biological Life Sciences | 33.1 | 30.6 | 31.8 | 35.5 | 37.7 | 38.9 | 41.7 | 43.6 | 44.5 | 47.7 | 47.8 |
| Business & Management | 3.9 | 6.6 | 11.6 | 16.9 | 19.1 | 25.0 | 27.8 | 28.9 | 30.1 | 31.0 | 31.1 |
| Communications | 34.4 | 36.8 | 41.8 | 49.3 | 48.5 | 53.4 | 52.6 | 54.0 | 57.0 | 58.2 | 59.9 |
| Communications Technologies | | | | | | | | 51.0 | 37.8 | 38.3 | 36.5 |
| Computer & Inform. Science | 11.4 | 12.9 | 14.5 | 18.7 | 18.8 | 23.0 | 26.5 | 28.3 | 29.3 | 28.7 | 29.9 |
| Education | 57.3 | 59.9 | 64.3 | 67.7 | 68.6 | 71.5 | 72.3 | 72.3 | 72.0 | 72.5 | 72.9 |
| Engineering | 1.6 | 2.3 | 3.6 | 5.2 | 6.1 | 8.1 | 9.0 | 9.3 | 10.4 | 10.7 | 11.4 |
| Engineering Technologies | 0.4 | 4.3 | 4.3 | 6.9 | 6.7 | 12.1 | 13.3 | 9.8 | 10.8 | 10.5 | 16.1 |
| Fine & Applied Arts/Vis.,Perf. Arts | 46.3 | 45.9 | 48.9 | 52.1 | 53.9 | 53.0 | 55.8 | 54.1 | 54.3 | 55.3 | 55.1 |
| Foreign Languages | 65.1 | 66.1 | 66.7 | 70.8 | 69.6 | 67.0 | 69.7 | 65.7 | 67.8 | 67.6 | 70.4 |
| Health Professions/Sciences | 56.4 | 60.2 | 66.5 | 70.3 | 71.1 | 73.9 | 75.7 | 75.2 | 75.5 | 76.2 | 76.1 |
| Home Economics | 92.7 | 91.1 | 91.5 | 91.9 | 91.2 | 90.2 | 91.5 | 90.8 | 88.6 | 88.3 | 87.8 |
| Law | 5.8 | 7.1 | 12.0 | 14.6 | 15.5 | 17.8 | 20.2 | 23.3 | 23.0 | 23.3 | 25.1 |
| Letters | 57.7 | 56.6 | 58.3 | 61.8 | 61.3 | 61.1 | 62.0 | 65.1 | 64.6 | 65.2 | 65.5 |
| Liberal/General Studies | | | | | | | | 61.5 | 64.5 | 61.9 | 61.2 |
| Library Science | 79.9 | 77.8 | 78.3 | 80.0 | 80.4 | 82.7 | 82.3 | 81.5 | 79.9 | 80.5 | 80.1 |
| Mathematics | 29.8 | 31.0 | 34.0 | 34.0 | 34.7 | 34.1 | 33.2 | 34.5 | 34.7 | 35.0 | 35.2 |
| Military Science | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 2.0 | 0.9 | 0.8 | 0.8 | 2.4 |
| Parks, Recreation | | | | | | | | 53.3 | 54.2 | 55.7 | 52.7 |
| Philosophy/Religion | | | | | | | | 38.9 | 35.7 | 39.9 | 38.7 |
| Physical Sciences | 14.1 | 14.6 | 15.0 | 17.0 | 18.2 | 18.4 | 21.7 | 21.4 | 22.5 | 23.2 | 24.2 |
| Protective Services | | | | | | | | 26.9 | 26.1 | 31.2 | 30.3 |
| Psychology | 38.4 | 39.8 | 46.7 | 52.0 | 54.1 | 58.0 | 58.8 | 61.4 | 63.0 | 63.8 | 64.8 |
| Public Affairs & Services | 47.0 | 45.3 | 45.3 | 47.9 | 50.8 | 55.4 | 57.3 | 62.4 | 61.8 | 63.0 | 62.5 |
| Social Sciences | 28.2 | 28.8 | 31.6 | 33.2 | 35.3 | 37.6 | 37.8 | 37.8 | 37.9 | 38.3 | 39.2 |
| Theology | 23.4 | 27.2 | 32.1 | 30.5 | 32.0 | 33.6 | 34.8 | 27.1 | 33.3 | 34.8 | 35.8 |
| Interdisciplinary Studies | 39.2 | 45.8 | 46.5 | 37.5 | 38.8 | 39.8 | 42.9 | 42.8 | 40.8 | 42.1 | 42.2 |
| **All Disciplines** | **40.6** | **43.1** | **46.4** | **48.3** | **49.1** | **50.3** | **50.8** | **50.1** | **49.5** | **49.9** | **50.3** |

SOURCE: National Center for Education Statistics, Unpublished

## TABLE 2-13

### BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1983-84

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| TOTAL, ALL DISCIPLINE DIVISIONS | 974,309 | 482,319 | 491,990 | 284,263 | 143,595 | 140,668 | 33,209 | 22,064 | 11,145 |
| Agribusiness & Ag Production | 6,020 | 4,654 | 1,366 | 884 | 671 | 213 | 196 | 154 | 42 |
| Agricultural Sciences | 9,225 | 5,729 | 3,496 | 2,228 | 1,533 | 695 | 749 | 641 | 108 |
| Animal Sciences | 3,974 | 2,210 | 1,764 | 608 | 389 | 219 | 206 | 171 | 35 |
| Food Sciences | 553 | 249 | 304 | 318 | 165 | 153 | 78 | 57 | 21 |
| Plant Sciences | 2,859 | 1,940 | 919 | 887 | 639 | 248 | 362 | 319 | 43 |
| Soil Sciences | 257 | 182 | 75 | 120 | 102 | 18 | 86 | 81 | 5 |
| Agricultural Sciences, Other | 1,582 | 1,148 | 434 | 295 | 238 | 57 | 17 | 13 | 4 |
| Renewable Natural Resources | 4,072 | 2,823 | 1,249 | 1,066 | 785 | 281 | 227 | 206 | 21 |
| Conservation | 319 | 190 | 129 | 29 | 22 | 7 | 4 | 3 | 1 |
| Fisheries | 139 | 116 | 23 | 87 | 63 | 24 | 33 | 29 | 4 |
| Forestry Sciences | 1,748 | 1,354 | 394 | 539 | 407 | 132 | 119 | 112 | 7 |
| Wildlife Management | 702 | 479 | 223 | 139 | 111 | 28 | 22 | 18 | 4 |
| Natural Resources, Other | 1,164 | 684 | 480 | 272 | 182 | 90 | 49 | 44 | 5 |
| Architecture & Environmental Design Total | 9,186 | 5,895 | 3,291 | 3,223 | 2,197 | 1,026 | 84 | 62 | 22 |
| Architecture | 4,567 | 3,495 | 1,072 | 1,610 | 1,195 | 415 | 23 | 18 | 5 |
| Arch. & Environmental Design, other | 4,619 | 2,400 | 2,219 | 1,613 | 1,002 | 611 | 61 | 44 | 17 |
| Area and Ethnic Studies | 2,879 | 1,184 | 1,695 | 888 | 463 | 425 | 139 | 90 | 49 |
| Business & Management | 222,753 | 127,428 | 95,325 | 66,594 | 46,532 | 20,062 | 976 | 775 | 201 |
| Business & Management, General | 42,723 | 24,534 | 18,189 | 12,271 | 8,655 | 3,616 | 189 | 142 | 47 |
| Accounting | 47,692 | 25,276 | 22,416 | 3,297 | 2,090 | 1,207 | 53 | 36 | 17 |
| Banking and Finance | 17,576 | 11,622 | 5,954 | 4,433 | 3,174 | 1,259 | 49 | 42 | 7 |
| Business Administration & Mgmt. | 68,229 | 39,932 | 28,297 | 34,917 | 24,605 | 10,312 | 425 | 354 | 71 |
| Business Economics | 3,197 | 2,098 | 1,099 | 336 | 232 | 104 | 36 | 28 | 8 |
| Institutional Management | 3,392 | 2,044 | 1,348 | 180 | 128 | 52 | 2 | 1 | 1 |
| Labor/Industrial Relations | 1,427 | 765 | 662 | 809 | 468 | 341 | 17 | 13 | 4 |
| Management Information Systems | 2,440 | 1,354 | 1,086 | 605 | 460 | 145 | 1 | 1 | 0 |
| Management Sciences | 2,610 | 1,594 | 1,016 | 2,471 | 1,806 | 665 | 68 | 64 | 4 |
| Marketing Management/Research | 25,055 | 13,212 | 11,843 | 1,659 | 931 | 728 | 41 | 27 | 14 |
| Personnel Management | 1,822 | 870 | 952 | 327 | 215 | 112 | 1 | 1 | 0 |
| Business & Management, Other | 6,590 | 4,127 | 2,463 | 5,289 | 3,768 | 1,521 | 94 | 66 | 28 |
| Business & Office | 3,862 | 1,021 | 2,841 | 13 | 10 | 3 | 0 | 0 | 0 |
| Marketing & Distribution | 3,416 | 1,460 | 1,956 | 46 | 23 | 23 | 1 | 0 | 1 |
| Communications | 38,586 | 15,774 | 22,812 | 3,513 | 1,511 | 2,002 | 215 | 128 | 87 |
| Advertising | 2,360 | 850 | 1,510 | 127 | 53 | 74 | 1 | 0 | 1 |
| Journalism | 9,795 | 3,669 | 6,126 | 1,141 | 501 | 640 | 33 | 20 | 13 |
| Public Relations | 1,171 | 337 | 834 | 100 | 36 | 64 | 0 | 0 | 0 |
| Radio/TV | 6,864 | 3,716 | 3,148 | 294 | 161 | 133 | 16 | 13 | 3 |
| Communications, Other | 18,396 | 7,202 | 11,194 | 1,851 | 760 | 1,091 | 165 | 95 | 70 |
| Communications Technologies | 1,579 | 873 | 706 | 143 | 89 | 54 | 4 | 3 | 1 |
| Computer and Information Sciences | 32,172 | 20,246 | 11,926 | 6,190 | 4,379 | 1,811 | 251 | 225 | 26 |
| Comp. & Info Science, General | 26,191 | 16,699 | 9,492 | 5,292 | 3,805 | 1,487 | 242 | 218 | 24 |
| Computer Programming | 323 | 213 | 110 | 2 | 2 | 0 | 0 | 0 | 0 |
| Data Processing | 882 | 537 | 345 | 52 | 44 | 8 | 0 | 0 | 0 |
| Info. Systems & Design | 3,479 | 1,993 | 1,486 | 618 | 368 | 250 | 6 | 4 | 2 |
| System Analysis | 330 | 202 | 128 | 75 | 50 | 25 | 0 | 0 | 0 |
| Comp. & Int. Sci., Other | 971 | 602 | 369 | 151 | 110 | 41 | 3 | 3 | 0 |
| Education | 92,382 | 22,215 | 70,176 | 77,187 | 21,981 | 55,606 | 7,475 | 3,705 | 3,770 |
| Education, General | 1,766 | 354 | 1,412 | 7,994 | 2,253 | 5,741 | 1,227 | 574 | 653 |
| Bilingual/Bicultural Education | 91 | 10 | 81 | 309 | 80 | 229 | 16 | 7 | 9 |
| Curriculum and Instruction | 506 | 15 | 291 | 3,251 | 780 | 2,471 | 726 | 270 | 456 |
| Education Administration | 101 | 6 | 95 | 10,151 | 4,981 | 5,170 | 1,909 | 1,110 | 799 |
| Special Education | 10,501 | 656 | 9,845 | 10,547 | 1,342 | 9,205 | 239 | 81 | 158 |
| Student Counseling/Personnel Svcs | 122 | 28 | 94 | 9,352 | 2,630 | 6,722 | 483 | 250 | 233 |
| Elementary Education | 34,334 | 2,637 | 31,697 | 9,226 | 1,025 | 8,201 | 127 | 46 | 81 |
| Junior High Education | 393 | 77 | 316 | 337 | 53 | 284 | 1 | 0 | 1 |
| Preelementary Education | 4,555 | 105 | 4,450 | 1,595 | 93 | 1,502 | 24 | 1 | 23 |
| Secondary Education | 2,509 | 1,010 | 1,499 | 3,150 | 1,197 | 1,953 | 101 | 44 | 57 |
| Agricultural Education | 859 | 715 | 144 | 292 | 218 | 74 | 28 | 23 | 5 |
| Art Education | 1,428 | 288 | 1,140 | 589 | 143 | 446 | 42 | 19 | 23 |
| Business Education | 2,080 | 323 | 1,757 | 732 | 123 | 609 | 53 | 15 | 38 |

## TABLE 2-13 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1983-84 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Education (continued)** | | | | | | | | | |
| Health Education | 1,657 | 466 | 1,191 | 721 | 157 | 564 | 58 | 17 | 41 |
| Home Economics Education | 1,277 | 26 | 1,251 | 285 | 3 | 282 | 10 | 1 | 9 |
| Industrial Arts Education | 2,878 | 2,571 | 307 | 852 | 686 | 146 | 83 | 52 | 31 |
| Mathematics Education | 775 | 302 | 473 | 415 | 149 | 267 | 32 | 14 | 18 |
| Music Education | 4,085 | 1,773 | 2,312 | 920 | 433 | 487 | 73 | 48 | 25 |
| Physical Education | 13,936 | 6,935 | 7,001 | 3,575 | 1,855 | 1,720 | 204 | 124 | 80 |
| Reading Education | 188 | 18 | 170 | 3,694 | 265 | 3,429 | 110 | 26 | 84 |
| Science Education | 702 | 327 | 375 | 411 | 168 | 243 | 56 | 38 | 18 |
| Social Science Education | 638 | 341 | 297 | 125 | 60 | 65 | 2 | 1 | 1 |
| Social Studies Education | 885 | 494 | 391 | 116 | 68 | 48 | 14 | 11 | 3 |
| Trade & Industrial Education | 1,810 | 1,417 | 393 | 794 | 452 | 342 | 71 | 47 | 24 |
| Education, Other | 4,706 | 1,321 | 3,385 | 7,835 | 2,427 | 5,408 | 1,804 | 884 | 920 |
| **Engineering** | **75,732** | **65,064** | **10,668** | **20,094** | **17,998** | **2,096** | **2,979** | **2,814** | **165** |
| Engineering, General | 3,706 | 3,080 | 626 | 1,230 | 1,083 | 147 | 307 | 300 | 7 |
| Aerospace Engineering | 2,534 | 2,359 | 175 | 562 | 535 | 27 | 106 | 104 | 2 |
| Agricultural Engineering | 739 | 679 | 60 | 142 | 127 | 15 | 44 | 43 | 1 |
| Architectural Engineering | 411 | 358 | 53 | 40 | 38 | 2 | 5 | 5 | 0 |
| Bioengineering | 540 | 388 | 152 | 245 | 180 | 65 | 51 | 42 | 9 |
| Ceramic Engineering | 304 | 226 | 78 | 100 | 81 | 19 | 17 | 16 | 1 |
| Chemical Engineering | 7,475 | 5,604 | 1,871 | 1,514 | 1,320 | 194 | 330 | 311 | 19 |
| Civil Engineering | 9,693 | 8,390 | 1,303 | 3,146 | 2,820 | 326 | 369 | 345 | 24 |
| Computer Engineering | 1,480 | 1,223 | 257 | 440 | 387 | 53 | 23 | 20 | 3 |
| Elec, Comm. Engineering | 19,943 | 17,919 | 2,024 | 5,078 | 4,693 | 385 | 585 | 571 | 14 |
| Engineering Mechanics | 349 | 301 | 48 | 167 | 152 | 15 | 67 | 64 | 3 |
| Engineering Physics | 342 | 314 | 28 | 63 | 59 | 4 | 22 | 21 | 1 |
| Engineering Science | 260 | 205 | 55 | 104 | 93 | 11 | 24 | 23 | 1 |
| Environ. Health Engineering | 190 | 129 | 61 | 360 | 273 | 87 | 36 | 34 | 2 |
| Geological Engineering | 381 | 312 | 69 | 44 | 39 | 5 | 8 | 8 | 0 |
| Geophysical Engineering | 103 | 88 | 15 | 11 | 10 | 1 | 5 | 4 | 1 |
| Industrial Engineering | 3,957 | 2,883 | 1,054 | 1,557 | 1,279 | 278 | 119 | 102 | 17 |
| Materials Engineering | 394 | 295 | 99 | 301 | 234 | 67 | 152 | 138 | 14 |
| Mechanical Engineering | 16,629 | 14,868 | 1,761 | 2,797 | 2,613 | 184 | 319 | 312 | 7 |
| Metallurgical Engineering | 654 | 510 | 144 | 283 | 252 | 31 | 98 | 84 | 14 |
| Mining & Mineral Engineering | 524 | 485 | 39 | 91 | 87 | 4 | 12 | 12 | 0 |
| Naval & Marine Engineering | 651 | 616 | 35 | 92 | 87 | 5 | 5 | 5 | 0 |
| Nuclear Engineering | 421 | 384 | 37 | 297 | 286 | 11 | 114 | 108 | 6 |
| Ocean Engineering | 166 | 149 | 17 | 95 | 88 | 7 | 9 | 9 | 0 |
| Petroleum Engineering | 1,634 | 1,454 | 180 | 281 | 267 | 14 | 21 | 21 | 0 |
| Surveying & Mapping Sciences | 94 | 73 | 21 | 16 | 14 | 2 | 0 | 0 | 0 |
| Systems Engineering | 242 | 184 | 58 | 144 | 124 | 20 | 21 | 21 | 0 |
| Textile Engineering | 40 | 24 | 16 | 11 | 8 | 3 | 1 | 1 | 0 |
| Engineering, Other | 1,930 | 1,568 | 362 | 683 | 569 | 114 | 109 | 90 | 19 |
| **Engineering & Related Technologies** | **18,712** | **17,245** | **1,467** | **567** | **506** | **61** | **2** | **2** | **0** |
| Electronic Technology | 4,525 | 4,261 | 264 | 4 | 4 | 0 | 0 | 0 | 0 |
| Industrial Production Technology | 4,524 | 4,132 | 392 | 287 | 255 | 32 | 0 | 0 | 0 |
| Technologies, Other | 9,663 | 8,852 | 811 | 276 | 247 | 29 | 2 | 2 | 0 |
| **Foreign Languages** | **9,479** | **2,540** | **6,939** | **1,773** | **571** | **1,202** | **462** | **208** | **254** |
| German | 1,347 | 473 | 874 | 267 | 99 | 168 | 74 | 40 | 34 |
| French | 2,876 | 575 | 2,301 | 418 | 101 | 317 | 86 | 27 | 59 |
| Spanish | 3,254 | 835 | 2,419 | 537 | 153 | 384 | 102 | 50 | 52 |
| Other Foreign Languages | 2,002 | 657 | 1,345 | 551 | 218 | 333 | 200 | 91 | 109 |
| **Allied Health** | **15,518** | **2,445** | **11,073** | **2,776** | **702** | **2,074** | **42** | **19** | **23** |
| Dental Services | 1,071 | 11 | 1,060 | 17 | 4 | 13 | 0 | 0 | 0 |
| Medical Technology | 2,714 | 535 | 2,179 | 46 | 13 | 33 | 0 | 0 | 0 |
| Occupational Therapy | 1,692 | 93 | 1,599 | 258 | 34 | 224 | 1 | 0 | 1 |
| Physical Therapy | 2,947 | 552 | 2,395 | 334 | 110 | 289 | 3 | 2 | 1 |
| Allied Health, Other | 5,094 | 1,254 | 3,840 | 2,056 | 541 | 1,515 | 38 | 17 | 21 |
| **Health Sciences** | **50,820** | **7,634** | **43,186** | **14,667** | **3,567** | **11,100** | **1,121** | **554** | **567** |
| Speech Pathology/Audiology | 2,901 | 155 | 2,746 | 3,067 | 187 | 2,880 | 120 | 54 | 66 |
| Health Care Administration | 3,014 | 572 | 2,442 | 2,176 | 961 | 1,215 | 27 | 15 | 12 |
| Medical Laboratory | 1,504 | 297 | 1,207 | 89 | 23 | 66 | 2 | 0 | 2 |

TABLE 2-13 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1983-84 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Health Sciences, cont.** | | | | | | | | | |
| Nursing | 33,092 | 1,829 | 31,263 | 5,744 | 448 | 5,296 | 220 | 16 | 204 |
| Pharmacy | 5,480 | 2,774 | 2,706 | 333 | 215 | 118 | 153 | 105 | 48 |
| Health Sciences, Other | 4,829 | 2,007 | 2,822 | 3,298 | 1,733 | 1,525 | 599 | 364 | 235 |
| **Home Economics** | 14,961 | 753 | 14,208 | 2,316 | 247 | 2,069 | 272 | 67 | 205 |
| **Vocational Home Economics** | 1,355 | 263 | 1,092 | 106 | 29 | 77 | 7 | 3 | 4 |
| **Law** | 1,272 | 533 | 739 | 1,802 | 1,387 | 415 | 121 | 100 | 21 |
| **Letters** | 33,739 | 11,507 | 22,232 | 5,818 | 2,058 | 3,760 | 1,215 | 557 | 658 |
| English, General | 23,434 | 7,575 | 15,859 | 3,500 | 1,211 | 2,289 | 695 | 317 | 378 |
| Literature, English | 1,261 | 508 | 753 | 243 | 90 | 153 | 63 | 26 | 37 |
| Speech, Debate & Forensic | 5,967 | 2,357 | 3,610 | 626 | 211 | 415 | 88 | 49 | 39 |
| Letters, Other | 3,077 | 1,067 | 2,010 | 1,449 | 546 | 903 | 369 | 165 | 204 |
| **Liberal/General Studies** | 18,815 | 8,718 | 10,097 | 1,173 | 417 | 756 | 48 | 27 | 21 |
| **Library & Archival Science** | 255 | 33 | 222 | 3,805 | 766 | 3,009 | 74 | 38 | 36 |
| **Life Sciences** | 38,640 | 20,558 | 18,082 | 5,406 | 2,996 | 2,410 | 3,437 | 2,381 | 1,056 |
| Biology, General | 27,393 | 14,408 | 12,971 | 2,313 | 1,305 | 1,008 | 617 | 429 | 188 |
| Biochem & Biophysics | 2,052 | 1,209 | 843 | 254 | 145 | 109 | 490 | 348 | 142 |
| Microbiology | 2,214 | 1,018 | 1,196 | 413 | 204 | 209 | 351 | 208 | 143 |
| Zoology | 3,451 | 1,983 | 1,468 | 960 | 570 | 390 | 931 | 687 | 244 |
| Life Sciences, Other | 3,544 | 1,940 | 1,604 | 1,466 | 772 | 694 | 1,048 | 709 | 339 |
| **Mathematics** | 13,211 | 7,366 | 5,845 | 2,741 | 1,791 | 950 | 695 | 569 | 126 |
| **Military Science & Technology** | 195 | 179 | 16 | 127 | 126 | 1 | 0 | 0 | 0 |
| **Multi-interdisciplinary Studies** | 16,734 | 8,222 | 8,512 | 3,148 | 1,865 | 1,283 | 378 | 240 | 138 |
| **Parks & Recreation** | 4,752 | 1,765 | 2,987 | 555 | 254 | 301 | 27 | 19 | 8 |
| **Philosophy and Religion** | 6,435 | 4,299 | 2,136 | 1,153 | 741 | 412 | 442 | 330 | 112 |
| **Theology** | 5,914 | 4,366 | 1,548 | 5,106 | 3,408 | 1,698 | 1,202 | 1,124 | 78 |
| **Physical Sciences** | 23,525 | 17,038 | 6,487 | 5,550 | 4,246 | 1,304 | 3,298 | 2,809 | 489 |
| Astronomy | 73 | 55 | 18 | 56 | 48 | 10 | 56 | 52 | 4 |
| Astrophysics | 21 | 19 | 2 | 11 | 11 | 0 | 10 | 9 | 1 |
| Atmospheric Sci & Meteorology | 478 | 380 | 98 | 246 | 213 | 33 | 50 | 45 | 5 |
| Chemistry | 10,704 | 6,973 | 3,731 | 1,667 | 1,137 | 530 | 1,744 | 1,425 | 319 |
| Geology | 6,171 | 4,645 | 1,526 | 1,311 | 998 | 313 | 233 | 192 | 41 |
| Geochemistry, Geophysics & Seismology | 187 | 149 | 38 | 125 | 103 | 22 | 53 | 48 | 5 |
| Geological Sciences, Other | 191 | 140 | 51 | 78 | 48 | 30 | 29 | 26 | 3 |
| Oceanography | 162 | 134 | 28 | 113 | 82 | 31 | 69 | 50 | 19 |
| Earth Science | 733 | 542 | 191 | 105 | 67 | 38 | 22 | 17 | 5 |
| Physics | 3,907 | 3,350 | 557 | 1,332 | 1,140 | 192 | 953 | 877 | 76 |
| Physical Science, Other | 1,833 | 1,359 | 474 | 605 | 418 | 187 | 199 | 158 | 40 |
| Science Technologies | 146 | 96 | 50 | 25 | 23 | 4 | 9 | 6 | 2 |
| **Psychology** | 39,872 | 12,792 | 27,080 | 8,002 | 2,961 | 5,041 | 2,975 | 1,517 | 1,456 |
| **Protective Services** | 12,654 | 7,804 | 4,850 | 1,219 | 901 | 318 | 31 | 26 | 5 |
| Criminal Justice | 12,293 | 7,524 | 4,769 | 1,189 | 876 | 313 | 31 | 26 | 5 |
| Protective Services, Other | 361 | 270 | 91 | 30 | 25 | 5 | 0 | 0 | 0 |
| **Public Affairs** | 14,396 | 4,592 | 9,804 | 15,575 | 5,869 | 9,504 | 421 | 231 | 190 |
| **Social Sciences** | 93,212 | 52,102 | 41,110 | 10,465 | 6,496 | 3,969 | 2,911 | 2,030 | 881 |
| Anthropology | 2,693 | 999 | 1,694 | 740 | 312 | 428 | 327 | 164 | 163 |
| Archeology | 67 | 29 | 38 | 59 | 32 | 27 | 11 | 3 | 8 |
| Criminology | 1,005 | 568 | 440 | 79 | 56 | 23 | 5 | 4 | 1 |
| Economics | 20,719 | 13,645 | 7,074 | 1,897 | 1,446 | 451 | 729 | 620 | 109 |
| Geography | 3,199 | 2,179 | 1,020 | 563 | 406 | 157 | 120 | 95 | 25 |
| History | 16,642 | 10,363 | 6,279 | 1,887 | 1,364 | 523 | 961 | 376 | 585 |
| International Relations | 2,927 | 1,393 | 1,534 | 1,149 | 740 | 409 | 63 | 55 | 8 |
| Political Science & Govt. | 25,719 | 15,655 | 10,064 | 1,769 | 1,252 | 517 | 497 | 352 | 105 |
| Sociology | 13,145 | 4,218 | 8,927 | 1,398 | 456 | 942 | 520 | 289 | 231 |
| Social Sciences, Other | 7,073 | 3,043 | 4,030 | 1,264 | 660 | 604 | 158 | 67 | 42 |
| **Visual and Performing Arts** | 39,833 | 15,103 | 24,730 | 8,520 | 3,897 | 4,623 | 728 | 406 | 322 |
| Design | 4,734 | 1,781 | 2,953 | 234 | 124 | 110 | 0 | 0 | 0 |
| Dramatic Arts | 5,319 | 2,209 | 3,110 | 1,187 | 645 | 542 | 100 | 55 | 45 |
| Fine Arts | 16,210 | 5,120 | 11,090 | 2,833 | 1,114 | 1,719 | 147 | 38 | 109 |
| Music | 7,870 | 3,678 | 4,192 | 3,450 | 1,699 | 1,751 | 458 | 300 | 158 |
| Visual & Performing Arts, Other | 4,057 | 1,288 | 2,769 | 507 | 156 | 551 | 18 | 10 | 8 |

SOURCE: U.S. Department of Education, Center for Statistics, "Earned Degrees Conferred, 1984-85", unpublished

## TABLE 2-14

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1984-85

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| TOTAL, ALL DISCIPLINE DIVISIONS | 979,477 | 482,528 | 496,949 | 286,251 | 143,390 | 142,861 | 32,943 | 21,700 | 11,243 |
| Agribusiness & Ag Production | 5,763 | 4,471 | 1,292 | 792 | 614 | 178 | 194 | 163 | 31 |
| Agricultural Sciences | 8,719 | 5,458 | 3,261 | 2,077 | 1,426 | 651 | 823 | 708 | 115 |
| Animal Sciences | 3,805 | 2,139 | 1,666 | 647 | 440 | 207 | 236 | 198 | 38 |
| Food Sciences | 546 | 260 | 286 | 237 | 130 | 107 | 102 | 80 | 22 |
| Plant Sciences | 2,585 | 1,779 | 806 | 821 | 578 | 243 | 390 | 341 | 49 |
| Soil Sciences | 209 | 148 | 61 | 105 | 83 | 22 | 82 | 77 | 5 |
| Agricultural Sciences, Other | 1,574 | 1,132 | 442 | 267 | 195 | 72 | 13 | 12 | 1 |
| Renewable Natural Resources | 3,625 | 2,548 | 1,077 | 1,059 | 806 | 253 | 196 | 165 | 31 |
| Conservation | 229 | 139 | 90 | 38 | 32 | 6 | 0 | 0 | 0 |
| Fisheries | 150 | 115 | 35 | 107 | 80 | 27 | 17 | 12 | 5 |
| Forestry Sciences | 1,554 | 1,227 | 327 | 522 | 406 | 116 | 120 | 105 | 15 |
| Wildlife Management | 591 | 421 | 170 | 124 | 98 | 26 | 17 | 15 | 2 |
| Natural Resources, Other | 1,101 | 646 | 455 | 268 | 190 | 78 | 42 | 33 | 9 |
| Architecture & Environmental Design Total | 9,325 | 6,019 | 3,306 | 3,275 | 2,148 | 1,127 | 89 | 66 | 23 |
| Architecture | 4,624 | 3,515 | 1,109 | 1,757 | 1,238 | 519 | 25 | 16 | 9 |
| Arch. & Environmental Design, other | 4,701 | 2,504 | 2,197 | 1,518 | 910 | 608 | 64 | 50 | 14 |
| Area and Ethnic Studies | 2,867 | 1,099 | 1,768 | 879 | 464 | 415 | 137 | 86 | 51 |
| Business & Management | 225,513 | 125,403 | 100,110 | 67,461 | 46,592 | 20,869 | 864 | 718 | 146 |
| Business & Management, General | 42,904 | 24,098 | 18,806 | 14,001 | 9,621 | 4,380 | 181 | 150 | 31 |
| Accounting | 47,005 | 23,955 | 23,050 | 3,207 | 1,948 | 1,259 | 59 | 46 | 13 |
| Banking and Finance | 19,881 | 12,878 | 7,003 | 4,790 | 3,382 | 1,408 | 31 | 29 | 2 |
| Business Administration & Mgmt. | 66,073 | 37,621 | 28,452 | 35,024 | 24,656 | 10,368 | 392 | 330 | 62 |
| Business Economics | 3,583 | 2,317 | 1,266 | 248 | 186 | 62 | 41 | 38 | 3 |
| Institutional Management | 3,833 | 2,202 | 1,631 | 304 | 189 | 115 | 0 | 0 | 0 |
| Labor/Industrial Relations | 1,265 | 642 | 623 | 722 | 421 | 301 | 17 | 14 | 3 |
| Management Information Systems | 3,025 | 1,735 | 1,290 | 789 | 589 | 200 | 1 | 1 | 0 |
| Management Sciences | 2,353 | 1,338 | 1,015 | 818 | 630 | 188 | 44 | 38 | 6 |
| Marketing Management/Research | 26,352 | 13,352 | 13,000 | 1,683 | 940 | 743 | 27 | 21 | 6 |
| Personnel Management | 1,868 | 871 | 997 | 250 | 149 | 101 | 1 | 1 | 0 |
| Business & Management, Other | 7,371 | 4,394 | 2,977 | 5,625 | 3,881 | 1,744 | 70 | 50 | 20 |
| Business & Office | 4,031 | 1,063 | 2,968 | 16 | 4 | 12 | 0 | 0 | 0 |
| Marketing & Distribution | 3,807 | 1,566 | 2,241 | 50 | 28 | 22 | 2 | 0 | 2 |
| Communications | 40,358 | 16,318 | 24,040 | 3,460 | 1,447 | 2,013 | 228 | 138 | 90 |
| Advertising | 2,495 | 906 | 1,589 | 137 | 47 | 90 | 0 | 0 | 0 |
| Journalism | 10,503 | 3,868 | 6,635 | 1,143 | 482 | 661 | 38 | 26 | 12 |
| Public Relations | 1,250 | 338 | 912 | 88 | 24 | 64 | 0 | 0 | 0 |
| Radio/TV | 7,171 | 3,806 | 3,365 | 348 | 179 | 169 | 19 | 10 | 9 |
| Communications, Other | 18,939 | 7,400 | 11,539 | 1,744 | 715 | 1,029 | 171 | 102 | 69 |
| Communications Technologies | 1,725 | 920 | 805 | 209 | 129 | 80 | 6 | 5 | 1 |
| Computer and Information Sciences | 38,878 | 24,579 | 14,299 | 7,101 | 5,064 | 2,037 | 248 | 223 | 25 |
| Comp. & Info Science, General | 31,463 | 20,128 | 11,335 | 6,070 | 4,387 | 1,683 | 231 | 209 | 22 |
| Computer Programming | 337 | 263 | 74 | 29 | 25 | 4 | 0 | 0 | 0 |
| Data Processing | 1,053 | 622 | 431 | 21 | 14 | 7 | 0 | 0 | 0 |
| Info. Systems & Design | 4,295 | 2,494 | 1,799 | 719 | 451 | 268 | 10 | 7 | 3 |
| System Analysis | 515 | 292 | 223 | 91 | 71 | 20 | 0 | 0 | 0 |
| Comp. & Inf. Sci., Other | 1,217 | 780 | 437 | 171 | 116 | 55 | 7 | 7 | 0 |
| Education | 88,161 | 21,264 | 66,897 | 76,157 | 20,965 | 55,192 | 7,151 | 3,419 | 3,725 |
| Education, General | 2,032 | 427 | 1,605 | 8,256 | 2,292 | 5,964 | 1,157 | 538 | 619 |
| Bilingual/Bicultural Education | 115 | 14 | 101 | 309 | 71 | 238 | 10 | 3 | 7 |
| Curriculum and Instruction | 341 | 14 | 327 | 3,245 | 732 | 2,513 | 732 | 275 | 457 |
| Education Administration | 40 | 6 | 34 | 10,571 | 4,979 | 5,592 | 2,003 | 1,085 | 918 |
| Special Education | 9,134 | 574 | 8,560 | 9,933 | 1,211 | 8,722 | 235 | 81 | 154 |
| Student Counseling/Personnel Svcs | 118 | 33 | 85 | 9,089 | 2,469 | 6,620 | 456 | 205 | 251 |
| Elementary Education | 33,162 | 2,442 | 30,720 | 9,075 | 909 | 8,166 | 130 | 43 | 87 |
| Junior High Education | 484 | 79 | 405 | 403 | 50 | 353 | 3 | 2 | 1 |
| Preelementary Education | 4,275 | 79 | 4,196 | 1,125 | 40 | 1,085 | 30 | 5 | 25 |
| Secondary Education | 2,604 | 998 | 1,606 | 3,195 | 1,145 | 2,050 | 112 | 50 | 62 |
| Agricultural Education | 812 | 667 | 145 | 363 | 286 | 77 | 23 | 20 | 3 |
| Art Education | 1,272 | 243 | 1,029 | 579 | 154 | 425 | 38 | 16 | 22 |
| Business Education | 2,078 | 359 | 1,719 | 706 | 106 | 600 | 41 | 19 | 22 |

## TABLE 2-14 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1984-85 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Education (continued)** | | | | | | | | | |
| English Education | 1,035 | 208 | 827 | 378 | 73 | 305 | 31 | 6 | 25 |
| Health Education | 1,464 | 391 | 1,073 | 749 | 175 | 574 | 97 | 40 | 57 |
| Home Economics Education | 1,080 | 16 | 1,064 | 238 | 2 | 236 | 11 | 0 | 11 |
| Industrial Arts Education | 2,666 | 2,401 | 265 | 622 | 509 | 113 | 52 | 34 | 18 |
| Mathematics Education | 1,027 | 407 | 620 | 426 | 125 | 301 | 29 | 14 | 15 |
| Music Education | 3,671 | 1,527 | 2,144 | 945 | 409 | 536 | 75 | 54 | 21 |
| Physical Education | 13,484 | 6,913 | 6,571 | 3,603 | 1,850 | 1,753 | 227 | 134 | 93 |
| Reading Education | 161 | 16 | 145 | 3,211 | 235 | 2,976 | 82 | 14 | 68 |
| Science Education | 842 | 379 | 463 | 455 | 184 | 271 | 64 | 38 | 26 |
| Social Science Education | 533 | 275 | 258 | 133 | 47 | 86 | 9 | 7 | 2 |
| Social Studies Education | 957 | 548 | 409 | 168 | 89 | 79 | 7 | 4 | 3 |
| Trade & Industrial Education | 1,553 | 1,217 | 336 | 765 | 465 | 300 | 61 | 44 | 17 |
| Education, Other | 2,989 | 873 | 2,116 | 7,233 | 2,238 | 4,995 | 1,403 | 670 | 733 |
| **Engineering** | **77,154** | **65,959** | **11,195** | **20,926** | **18,684** | **2,242** | **3,221** | **3,014** | **207** |
| Engineering, General | 3,366 | 2,803 | 563 | 1,375 | 1,220 | 155 | 274 | 261 | 13 |
| Aerospace Engineering | 2,854 | 2,613 | 241 | 605 | 574 | 31 | 110 | 106 | 4 |
| Agricultural Engineering | 770 | 702 | 68 | 197 | 182 | 15 | 35 | 35 | 0 |
| Architectural Engineering | 372 | 303 | 69 | 49 | 45 | 4 | 6 | 6 | 0 |
| Bioengineering | 605 | 424 | 181 | 290 | 220 | 70 | 49 | 43 | 6 |
| Ceramic Engineering | 274 | 202 | 72 | 77 | 61 | 16 | 15 | 15 | 0 |
| Chemical Engineering | 7,146 | 5,289 | 1,857 | 1,544 | 1,277 | 267 | 418 | 379 | 39 |
| Civil Engineering | 9,162 | 7,931 | 1,231 | 3,172 | 2,835 | 337 | 377 | 356 | 21 |
| Computer Engineering | 1,839 | 1,529 | 310 | 495 | 434 | 61 | 30 | 30 | 0 |
| Elecal/Electronic, Comm. Engineering | 21,691 | 19,275 | 2,416 | 5,153 | 4,719 | 434 | 660 | 632 | 28 |
| Engineering Mechanics | 349 | 302 | 47 | 219 | 196 | 23 | 64 | 62 | 2 |
| Engineering Physics | 339 | 295 | 44 | 94 | 91 | 3 | 26 | 23 | 3 |
| Engineering Science | 356 | 299 | 57 | 183 | 164 | 19 | 26 | 25 | 1 |
| Environ. Health Engineering | 150 | 110 | 40 | 319 | 246 | 73 | 25 | 23 | 2 |
| Geological Engineering | 369 | 292 | 77 | 79 | 63 | 16 | 5 | 5 | 0 |
| Geophysical Engineering | 98 | 86 | 12 | 11 | 9 | 2 | 3 | 3 | 0 |
| Industrial Engineering | 3,914 | 2,766 | 1,148 | 1,462 | 1,235 | 227 | 139 | 125 | 14 |
| Materials Engineering | 388 | 283 | 105 | 348 | 275 | 73 | 180 | 157 | 23 |
| Mechanical Engineering | 16,794 | 15,045 | 1,749 | 3,053 | 2,848 | 205 | 409 | 385 | 24 |
| Metallurgical Engineering | 613 | 505 | 108 | 251 | 228 | 23 | 88 | 79 | 9 |
| Mining & Mineral Engineering | 462 | 432 | 30 | 92 | 88 | 4 | 10 | 10 | 0 |
| Naval & Marine Engineering | 595 | 567 | 28 | 101 | 95 | 6 | 9 | 9 | 0 |
| Nuclear Engineering | 401 | 355 | 46 | 290 | 271 | 19 | 85 | 82 | 3 |
| Ocean Engineering | 130 | 109 | 21 | 85 | 80 | 5 | 24 | 24 | 0 |
| Petroleum Engineering | 1,719 | 1,501 | 218 | 265 | 248 | 17 | 24 | 24 | 0 |
| Surveying & Mapping Sciences | 88 | 70 | 18 | 21 | 20 | 1 | 0 | 0 | 0 |
| Systems Engineering | 263 | 184 | 79 | 143 | 121 | 22 | 20 | 19 | 1 |
| Textile Engineering | 29 | 18 | 11 | 8 | 7 | 1 | 4 | 4 | 0 |
| Engineering, Other | 2,018 | 1,669 | 349 | 945 | 832 | 113 | 106 | 92 | 14 |
| **Engineering & Related Technologies** | **18,951** | **17,494** | **1,457** | **631** | **565** | **66** | **9** | **8** | **1** |
| Electronic Technology | 4,874 | 4,617 | 257 | 10 | 10 | 0 | 0 | 0 | 0 |
| Industrial Production Technology | 4,756 | 4,323 | 433 | 320 | 292 | 28 | 1 | 1 | 0 |
| Technologies, Other | 9,321 | 8,554 | 767 | 301 | 263 | 38 | 8 | 7 | 1 |
| **Foreign Languages** | **9,954** | **2,650** | **7,304** | **1,724** | **559** | **1,165** | **437** | **184** | **253** |
| German | 1,411 | 515 | 896 | 240 | 94 | 146 | 58 | 24 | 34 |
| French | 2,991 | 545 | 2,446 | 385 | 81 | 304 | 74 | 24 | 50 |
| Spanish | 3,415 | 830 | 2,585 | 505 | 150 | 355 | 115 | 41 | 74 |
| Other Foreign Languages | 2,137 | 760 | 1,377 | 594 | 234 | 360 | 190 | 95 | 95 |
| **Allied Health** | **14,203** | **2,542** | **11,661** | **2,917** | **696** | **2,221** | **57** | **25** | **32** |
| Dental Services | 942 | 20 | 922 | 23 | 1 | 22 | 0 | 0 | 0 |
| Medical Technology | 2,720 | 498 | 2,222 | 28 | 10 | 18 | 1 | 1 | 0 |
| Occupational Therapy | 1,853 | 112 | 1,741 | 309 | 21 | 288 | 1 | 0 | 1 |
| Physical Therapy | 3,129 | 626 | 2,503 | 400 | 114 | 286 | 2 | 2 | 0 |
| Allied Health, Other | 5,559 | 1,286 | 4,273 | 2,157 | 550 | 1,607 | 53 | 22 | 31 |
| **Health Sciences** | **50,310** | **7,244** | **43,066** | **14,466** | **3,439** | **11,027** | **1,142** | **540** | **602** |
| Speech Pathology/Audiology | 2,526 | 132 | 2,394 | 2,838 | 156 | 2,682 | 92 | 37 | 55 |
| Health Care Administration | 3,171 | 677 | 2,494 | 2,384 | 1,006 | 1,378 | 24 | 11 | 13 |
| Medical Laboratory | 1,492 | 277 | 1,215 | 105 | 25 | 80 | 0 | 0 | 0 |

## TABLE 2-14 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1984-85 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Health Sciences, cont.** | | | | | | | | | |
| Nursing | 33,654 | 1,937 | 31,717 | 5,761 | 458 | 5,303 | 273 | 27 | 246 |
| Pharmacy | 5,011 | 2,343 | 2,668 | 282 | 175 | 107 | 147 | 100 | 47 |
| Health Sciences, Other | 4,456 | 1,878 | 2,578 | 3,096 | 1,619 | 1,477 | 606 | 565 | 241 |
| **Home Economics** | 14,429 | 755 | 13,674 | 2,272 | 258 | 2,014 | 270 | 75 | 195 |
| **Vocational Home Economics** | 1,126 | 261 | 865 | 111 | 21 | 90 | 6 | 3 | 3 |
| **Law** | 1,157 | 449 | 708 | 1,796 | 1,377 | 419 | 105 | 88 | 17 |
| **Letters** | 34,091 | 11,663 | 22,428 | 5,934 | 2,064 | 3,870 | 1,239 | 572 | 667 |
| English, General | 23,572 | 7,742 | 15,830 | 3,640 | 1,246 | 2,394 | 698 | 314 | 384 |
| Literature, English | 1,321 | 501 | 820 | 226 | 65 | 161 | 73 | 31 | 42 |
| Speech, Debate & Forensic | 6,148 | 2,352 | 3,796 | 598 | 202 | 396 | 105 | 58 | 47 |
| Letters, Other | 3,050 | 1,068 | 1,982 | 1,470 | 551 | 919 | 363 | 169 | 194 |
| **Liberal/General Studies** | 19,191 | 8,571 | 10,620 | 1,180 | 449 | 731 | 53 | 28 | 25 |
| **Library & Archival Science** | 202 | 26 | 176 | 3,893 | 758 | 3,135 | 87 | 39 | 48 |
| **Life Sciences** | 38,445 | 20,064 | 18,381 | 5,059 | 2,647 | 2,412 | 3,432 | 2,307 | 1,125 |
| Biology, General | 27,593 | 14,205 | 13,388 | 2,130 | 1,122 | 1,008 | 658 | 431 | 227 |
| Biochem & Biophysics | 2,111 | 1,261 | 850 | 257 | 142 | 115 | 464 | 327 | 137 |
| Microbiology | 2,091 | 1,040 | 1,051 | 378 | 173 | 205 | 295 | 185 | 110 |
| Zoology | 3,287 | 1,835 | 1,452 | 895 | 546 | 349 | 909 | 634 | 275 |
| Life Sciences, Other | 3,363 | 1,723 | 1,640 | 1,399 | 664 | 735 | 1,106 | 730 | 376 |
| **Mathematics** | 15,146 | 8,164 | 6,982 | 2,882 | 1,874 | 1,008 | 699 | 590 | 109 |
| **Military Science & Technology** | 299 | 273 | 26 | 119 | 118 | 1 | 0 | 0 | 0 |
| **Multi-Interdisciplinary Studies** | 15,727 | 7,523 | 8,204 | 3,184 | 1,845 | 1,339 | 285 | 177 | 108 |
| **Parks & Recreation** | 4,593 | 1,739 | 2,854 | 544 | 241 | 303 | 36 | 23 | 13 |
| **Philosophy and Religion** | 6,400 | 4,244 | 2,156 | 1,167 | 701 | 466 | 468 | 377 | 91 |
| **Theology** | 6,039 | 4,403 | 1,636 | 4,352 | 2,846 | 1,506 | 1,140 | 1,036 | 104 |
| **Physical Sciences** | 23,597 | 17,011 | 6,586 | 5,782 | 4,442 | 1,340 | 3,390 | 2,838 | 552 |
| Astronomy | 90 | 71 | 19 | 70 | 56 | 14 | 50 | 44 | 6 |
| Astrophysics | 21 | 18 | 3 | 21 | 20 | 1 | 9 | 8 | 1 |
| Atmospheric Sci & Meteorology | 414 | 346 | 68 | 236 | 196 | 40 | 70 | 64 | 6 |
| Chemistry | 10,482 | 6,691 | 3,791 | 1,719 | 1,162 | 557 | 1,789 | 1,438 | 351 |
| Geology | 5,902 | 4,440 | 1,462 | 1,489 | 1,135 | 354 | 220 | 178 | 42 |
| Geochemistry, Geophysics & Seismology | 234 | 184 | 50 | 110 | 83 | 27 | 46 | 38 | 8 |
| Geological Sciences, Other | 172 | 126 | 46 | 93 | 65 | 28 | 23 | 18 | 5 |
| Oceanography | 161 | 125 | 36 | 118 | 82 | 36 | 62 | 43 | 19 |
| Earth Science | 688 | 491 | 197 | 114 | 78 | 36 | 46 | 38 | 8 |
| Physics | 4,097 | 3,538 | 559 | 1,523 | 1,333 | 190 | 951 | 867 | 84 |
| Physical Science, Other | 1,336 | 981 | 355 | 289 | 232 | 57 | 124 | 102 | 22 |
| Science Technologies | 135 | 84 | 51 | 14 | 10 | 4 | 13 | 13 | 0 |
| **Psychology** | 39,811 | 12,694 | 27,117 | 8,408 | 3,044 | 5,364 | 2,908 | 1,492 | 1,416 |
| **Protective Services** | 12,510 | 7,694 | 4,816 | 1,235 | 850 | 385 | 33 | 27 | 6 |
| Criminal Justice | 12,211 | 7,462 | 4,749 | 1,196 | 823 | 373 | 33 | 27 | 6 |
| Protective Services, Other | 299 | 231 | 67 | 39 | 27 | 12 | 0 | 0 | 0 |
| **Public Affairs** | 13,838 | 4,635 | 9,203 | 16,045 | 5,938 | 10,107 | 431 | 213 | 218 |
| **Social Sciences** | 91,461 | 51,172 | 40,289 | 10,380 | 6,400 | 3,980 | 2,951 | 1,933 | 918 |
| Anthropology | 2,625 | 995 | 1,630 | 742 | 313 | 429 | 343 | 174 | 169 |
| Archeology | 49 | 20 | 29 | 29 | 12 | 17 | 7 | 4 | 3 |
| Criminology | 1,109 | 629 | 480 | 58 | 36 | 22 | 3 | 1 | 2 |
| Economics | 20,711 | 13,562 | 7,149 | 1,992 | 1,508 | 484 | 749 | 627 | 122 |
| Geography | 3,100 | 2,100 | 1,000 | 562 | 380 | 182 | 134 | 103 | 31 |
| History | 16,048 | 10,075 | 5,973 | 1,921 | 1,120 | 801 | 468 | 304 | 164 |
| International Relations | 3,273 | 1,537 | 1,736 | 1,350 | 897 | 453 | 65 | 54 | 11 |
| Political Science & Govt. | 25,834 | 15,640 | 10,194 | 1,500 | 1,062 | 438 | 441 | 326 | 115 |
| Sociology | 11,968 | 3,701 | 8,267 | 1,022 | 456 | 566 | 480 | 232 | 248 |
| Social Sciences, Other | 6,744 | 2,913 | 3,831 | 1,204 | 616 | 588 | 161 | 108 | 53 |
| **Visual and Performing Arts** | 37,936 | 14,506 | 23,430 | 8,714 | 3,897 | 4,817 | 693 | 407 | 286 |
| Design | 4,700 | 1,776 | 2,924 | 267 | 133 | 134 | 0 | 0 | 0 |
| Dramatic Arts | 4,997 | 2,124 | 2,873 | 1,175 | 571 | 604 | 83 | 46 | 37 |
| Fine Arts | 15,053 | 4,789 | 10,264 | 1,090 | 2,824 | 1,734 | 161 | 54 | 107 |
| Music | 7,613 | 3,612 | 4,001 | 3,533 | 1,723 | 1,810 | 432 | 299 | 133 |
| Visual & Performing Arts, Other | 5,573 | 2,205 | 3,368 | 915 | 380 | 535 | 17 | 8 | 9 |

SOURCE: U.S. Department of Education, Center for Statistics, "Earned Degrees Conferred, 1985-86", unpublished

## TABLE 2-15

### BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1985-86

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **TOTAL, ALL DISCIPLINE DIVISIONS** | **987,823** | **485,923** | **501,900** | **288,567** | **143,508** | **145,059** | **33,653** | **21,819** | **11,834** |
| **Agribusiness & Ag Production** | **5,569** | **11,544** | **5,279** | **3,801** | **2,701** | **1,100** | **1,158** | **966** | **192** |
| **Agricultural Sciences** | **7,986** | **4,965** | **3,011** | **2,028** | **1,376** | **652** | **784** | **674** | **137** |
| Animal Sciences | 3,579 | 1,967 | 1,612 | 600 | 403 | 197 | 206 | 164 | 42 |
| Food Sciences | 537 | 264 | 273 | 253 | 137 | 116 | 101 | 73 | 28 |
| Plant Sciences | 2,271 | 1,612 | 659 | 785 | 549 | 236 | 392 | 337 | 55 |
| Soil Sciences | 167 | 123 | 44 | 129 | 89 | 40 | 77 | 68 | 9 |
| Agricultural Sciences, Other | 58 | 28 | 30 | 22 | 18 | 4 | 8 | 5 | 3 |
| **Renewable Natural Resources** | **3,278** | **2,346** | **932** | **949** | **682** | **267** | **185** | **148** | **37** |
| Conservation | 269 | 161 | 108 | 27 | 21 | 56 | 0 | 0 | 0 |
| Fisheries | 154 | 128 | 26 | 86 | 64 | 22 | 18 | 11 | 7 |
| Forestry Sciences | 1,298 | 1,048 | 250 | 491 | 358 | 133 | 110 | 94 | 16 |
| Wildlife Management | 586 | 419 | 167 | 114 | 91 | 23 | 15 | 11 | 4 |
| Natural Resources, Other | 971 | 590 | 381 | 231 | 148 | 83 | 42 | 32 | 10 |
| **Architecture & Environmental Design Total** | **9,199** | **5,824** | **3,295** | **3,260** | **2,129** | **1,131** | **73** | **56** | **17** |
| Architecture | 4,392 | 3,337 | 1,055 | 1,677 | 1,215 | 462 | 15 | 13 | 2 |
| Arch. & Environmental Design, other | 4,807 | 2,487 | 2,240 | 1,583 | 914 | 669 | 58 | 43 | 15 |
| **Area and Ethnic Studies** | **3,060** | **1,260** | **1,800** | **927** | **489** | **438** | **157** | **89** | **68** |
| **Business & Management** | **230,784** | **126,837** | **103,947** | **66,967** | **46,172** | **20,795** | **965** | **759** | **206** |
| Business & Management, General | 42,501 | 23,394 | 19,107 | 11,128 | 7,773 | 3,355 | 195 | 151 | 44 |
| Accounting | 45,617 | 22,644 | 22,973 | 3,101 | 1,891 | 1,210 | 53 | 38 | 15 |
| Banking and Finance | 22,483 | 14,692 | 7,791 | 4,872 | 3,464 | 1,408 | 53 | 48 | 5 |
| Business Administration & Mgmt. | 66,806 | 37,351 | 29,455 | 36,306 | 25,322 | 10,984 | 433 | 350 | 83 |
| Business Economics | 3,651 | 2,407 | 1,244 | 234 | 176 | 58 | 44 | 37 | 7 |
| Human Resources Development | 720 | 355 | 365 | 646 | 330 | 316 | 3 | 2 | 1 |
| Institutional Management | 4,497 | 2,532 | 1,965 | 257 | 175 | 82 | 1 | 0 | 1 |
| Labor/Industrial Relations | 1,205 | 601 | 604 | 593 | 316 | 277 | 16 | 13 | 3 |
| Management Information Systems | 3,205 | 1,812 | 1,393 | 995 | 739 | 256 | 5 | 3 | 2 |
| Management Sciences | 2,503 | 1,470 | 1,033 | 744 | 574 | 170 | 50 | 42 | 8 |
| Marketing Management/Research | 27,714 | 13,960 | 13,784 | 1,737 | 963 | 774 | 25 | 14 | 11 |
| Personnel Management | 1,759 | 794 | 965 | 269 | 149 | 120 | 2 | 0 | 2 |
| Business & Management, Other | 8,093 | 4,825 | 2,573 | 6,085 | 4,300 | 1,785 | 85 | 59 | 26 |
| **Business & Office** | **3,890** | **1,060** | **2,830** | **67** | **46** | **21** | **0** | **0** | **0** |
| **Marketing & Distribution** | **3,846** | **1,374** | **2,112** | **103** | **70** | **33** | **4** | **0** | **4** |
| **Communications** | **41,666** | **16,887** | **24,779** | **3,500** | **1,405** | **2,095** | **212** | **111** | **101** |
| Advertising | 2,677 | 974 | 1,703 | 136 | 46 | 90 | 3 | 2 | 1 |
| Journalism | 10,402 | 3,828 | 6,574 | 1,128 | 449 | 679 | 27 | 20 | 72 |
| Public Relations | 1,215 | 363 | 852 | 78 | 28 | 50 | 0 | 0 | 0 |
| Radio/TV | 7,233 | 3,890 | 3,343 | 312 | 173 | 139 | 11 | 8 | 3 |
| Communications, Other | 20,139 | 7,832 | 12,307 | 1,846 | 709 | 1,137 | 171 | 81 | 90 |
| **Communications Technologies** | **1,425** | **760** | **665** | **323** | **205** | **118** | **11** | **5** | **6** |
| **Computer and Information Sciences** | **41,889** | **26,923** | **14,966** | **8,070** | **5,658** | **2,412** | **344** | **299** | **45** |
| Comp. & Info Science, General | 34,072 | 22,285 | 11,787 | 6,813 | 4,881 | 1,932 | 332 | 291 | 41 |
| Computer Programming | 340 | 262 | 78 | 14 | 8 | 6 | 0 | 0 | 0 |
| Data Processing | 1,067 | 602 | 465 | 35 | 20 | 15 | 0 | 0 | 0 |
| Info. Systems & Design | 4,305 | 2,465 | 1,840 | 893 | 526 | 367 | 3 | 1 | 2 |
| System Analysis | 487 | 289 | 198 | 96 | 59 | 37 | 0 | 0 | 0 |
| Comp. & Inf. Sci., Other | 1,618 | 1,020 | 598 | 219 | 164 | 55 | 9 | 7 | 2 |
| **Education** | **87,221** | **20,986** | **66,235** | **76,353** | **20,719** | **55,634** | **7,110** | **3,315** | **3,795** |
| Education, General | 1,694 | 364 | 1,330 | 8,038 | 2,119 | 5,919 | 1,093 | 463 | 630 |
| Bilingual/Bicultural Education | 95 | 8 | 87 | 327 | 73 | 254 | 13 | 6 | 7 |
| Curriculum and Instruction | 434 | 20 | 414 | 3,237 | 713 | 2,524 | 678 | 263 | 415 |
| Education Administration | 51 | 4 | 47 | 10,296 | 4,917 | 5,379 | 2,108 | 1,102 | 1,006 |
| Special Education | 8,206 | 540 | 7,666 | 9,311 | 1,079 | 8,232 | 245 | 86 | 159 |
| Student Counseling/Personnel Svcs | 122 | 23 | 99 | 9,314 | 2,362 | 6,952 | 417 | 215 | 202 |
| Elementary Education | 34,725 | 2,579 | 32,146 | 9,550 | 894 | 8,656 | 110 | 26 | 84 |
| Junior High Education | 570 | 100 | 470 | 406 | 51 | 355 | 3 | 2 | 1 |
| Preelementary Education | 4,113 | 81 | 4,032 | 1,318 | 35 | 1,283 | 33 | 4 | 29 |
| Secondary Education | 3,219 | 1,254 | 1,965 | 3,210 | 1,215 | 1,995 | 121 | 57 | 64 |
| Agricultural Education | 713 | 577 | 136 | 311 | 253 | 58 | 26 | 22 | 4 |
| Art Education | 1,070 | 230 | 480 | 511 | 136 | 375 | 39 | 17 | 22 |
| Business Education | 2,134 | 411 | 1,723 | 604 | 122 | 482 | 34 | 16 | 18 |

## TABLE 2-15 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1985-86 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Education (continued)** | | | | | | | | | |
| English Education | 1,005 | 186 | 819 | 383 | 75 | 308 | 28 | 8 | 20 |
| Health Education | 1,412 | 348 | 1,064 | 712 | 153 | 559 | 79 | 27 | 52 |
| Home Economics Education | 866 | 6 | 860 | 202 | 4 | 198 | 8 | 1 | 7 |
| Industrial Arts Education | 2,360 | 2,091 | 269 | 648 | 510 | 138 | 53 | 36 | 17 |
| Mathematics Education | 1,259 | 493 | 766 | 444 | 153 | 291 | 32 | 16 | 16 |
| Music Education | 3,330 | 1,415 | 1,915 | 862 | 368 | 494 | 80 | 52 | 28 |
| Physical Education | 12,811 | 6,718 | 6,093 | 3,439 | 1,729 | 1,710 | 222 | 136 | 86 |
| Reading Education | 127 | 10 | 117 | 3,209 | 202 | 3,007 | 99 | 23 | 76 |
| Science Education | 1,052 | 465 | 587 | 508 | 207 | 301 | 51 | 34 | 17 |
| Social Science Education | 518 | 317 | 201 | 155 | 62 | 93 | 8 | 6 | 2 |
| Social Studies Education | 874 | 538 | 336 | 144 | 67 | 77 | 11 | 8 | 3 |
| Trade & Industrial Education | 1,493 | 1,161 | 332 | 691 | 412 | 279 | 71 | 46 | 25 |
| Education, Other | 2,748 | 876 | 1,872 | 9,242 | 2,829 | 6,413 | 1,424 | 631 | 793 |
| **Engineering** | **76,333** | **65,284** | **11,049** | **21,059** | **18,663** | **2,396** | **3,400** | **3,172** | **228** |
| Engineering, General | 2,886 | 2,379 | 507 | 1,191 | 1,068 | 123 | 261 | 247 | 14 |
| Aerospace Engineering | 2,902 | 2,654 | 248 | 621 | 578 | 43 | 112 | 110 | 2 |
| Agricultural Engineering | 737 | 660 | 77 | 156 | 12 | 14 | 43 | 42 | 1 |
| Architectural Engineering | 377 | 319 | 58 | 52 | 49 | 3 | 6 | 6 | 0 |
| Bioengineering | 607 | 399 | 208 | 286 | 212 | 74 | 57 | 50 | 7 |
| Ceramic Engineering | 285 | 192 | 93 | 105 | 85 | 20 | 26 | 22 | 4 |
| Chemical Engineering | 5,877 | 4,425 | 1,452 | 1,361 | 1,147 | 214 | 446 | 396 | 50 |
| Civil Engineering | 8,678 | 7,538 | 1,141 | 2,926 | 2,626 | 300 | 395 | 366 | 29 |
| Computer Engineering | 2,192 | 1,839 | 353 | 612 | 529 | 83 | 56 | 55 | 1 |
| Elecal/Electronic, Comm. Engineering | 23,742 | 20,906 | 2,836 | 5,534 | 4,978 | 556 | 722 | 683 | 39 |
| Engineering Mechanics | 307 | 274 | 33 | 180 | 163 | 17 | 79 | 78 | 1 |
| Engineering Physics | 376 | 320 | 56 | 72 | 70 | 2 | 26 | 26 | 0 |
| Engineering Science | 319 | 247 | 72 | 188 | 165 | 23 | 31 | 29 | 2 |
| Environ. Health Engineering | 118 | 93 | 25 | 301 | 231 | 70 | 22 | 20 | 2 |
| Geological Engineering | 287 | 240 | 47 | 56 | 51 | 5 | 2 | 2 | 0 |
| Geophysical Engineering | 96 | 83 | 13 | 3 | 3 | 0 | 1 | 1 | 0 |
| Industrial Engineering | 4,162 | 2,902 | 1,260 | 1,553 | 1,374 | 279 | 130 | 111 | 19 |
| Materials Engineering | 436 | 300 | 136 | 394 | 333 | 61 | 165 | 144 | 21 |
| Mechanical Engineering | 16,194 | 14,525 | 1,669 | 3,075 | 2,838 | 237 | 426 | 415 | 11 |
| Metallurgical Engineering | 536 | 430 | 106 | 284 | 232 | 52 | 102 | 95 | 7 |
| Mining & Mineral Engineering | 342 | 323 | 19 | 95 | 85 | 10 | 19 | 17 | 2 |
| Naval & Marine Engineering | 487 | 466 | 21 | 63 | 61 | 2 | 12 | 12 | 0 |
| Nuclear Engineering | 4413 | 366 | 47 | 260 | 242 | 18 | 74 | 70 | 4 |
| Ocean Engineering | 133 | 115 | 18 | 89 | 86 | 3 | 37 | 33 | 4 |
| Petroleum Engineering | 1,459 | 1,322 | 137 | 274 | 248 | 26 | 32 | 31 | 1 |
| Surveying & Mapping Sciences | 108 | 90 | 18 | 19 | 16 | 3 | 2 | 2 | 0 |
| Systems Engineering | 231 | 154 | 77 | 186 | 155 | 31 | 14 | 14 | 0 |
| Textile Engineering | 26 | 21 | 5 | 4 | 4 | 0 | 3 | 3 | 0 |
| Engineering, Other | 2,019 | 1,702 | 317 | 1,019 | 892 | 127 | 99 | 92 | 7 |
| **Engineering & Related Technologies** | **19,620** | **18,088** | **1,532** | **602** | **505** | **97** | **10** | **9** | **1** |
| Electronic Technology | 4,666 | 4,369 | 297 | 26 | 24 | 2 | 0 | 0 | 0 |
| Industrial Production Technology | 4,820 | 4,404 | 416 | 302 | 263 | 39 | 0 | 0 | 0 |
| Technologies, Other | 10,134 | 9,315 | 819 | 274 | 218 | 56 | 10 | 9 | 1 |
| **Foreign Languages** | **10,102** | **2,784** | **7,318** | **1,721** | **509** | **1,212** | **448** | **185** | **263** |
| German | 1,478 | 587 | 891 | 265 | 100 | 165 | 85 | 38 | 47 |
| French | 3,015 | 545 | 2,470 | 409 | 84 | 325 | 86 | 22 | 64 |
| Spanish | 3,385 | 859 | 2,526 | 521 | 138 | 383 | 95 | 34 | 61 |
| Other Foreign Languages | 2,306 | 793 | 1,513 | 526 | 187 | 339 | 182 | 91 | 91 |
| **Allied Health** | **13,648** | **2,497** | **11,151** | **3,045** | **720** | **2,325** | **53** | **24** | **29** |
| Dental Services | 846 | 8 | 838 | 29 | 4 | 25 | 0 | 0 | 0 |
| Medical Technology | 2,554 | 482 | 2,072 | 33 | 8 | 25 | 0 | 0 | 0 |
| Occupational Therapy | 2,015 | 114 | 1,901 | 281 | 21 | 260 | 1 | 0 | 1 |
| Physical Therapy | 3,039 | 627 | 2,412 | 405 | 113 | 292 | 1 | 1 | 0 |
| Allied Health, Other | 5,194 | 1,266 | 3,928 | 2,297 | 574 | 1,723 | 51 | 23 | 28 |
| **Health Sciences** | **50,887** | **7,186** | **43,701** | **15,579** | **3,740** | **11,839** | **1,188** | **580** | **608** |
| Speech Pathology/Audiology | 2,464 | 108 | 2,356 | 2,868 | 160 | 2,708 | 78 | 22 | 56 |
| Health Care Administration | 3,154 | 610 | 2,544 | 2,549 | 987 | 1,562 | 26 | 18 | 8 |
| Medical Laboratory | 1,305 | 270 | 1,035 | 80 | 26 | 54 | 1 | 0 | 1 |

## TABLE 2-15 (continued)

BACHELOR'S, MASTER'S AND DOCTORAL DEGREES CONFERRED BY SEX AND FIELD, 1985-86 (continued)

| DISCIPLINE DIVISION & SPECIALTY | BACHELOR'S DEGREES | | | MASTER'S DEGREES | | | DOCTOR'S DEGREES | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| **Health Sciences, cont.** | | | | | | | | | |
| Nursing | 34,097 | 1,958 | 32,139 | 6,050 | 479 | 5,571 | 277 | 20 | 257 |
| Pharmacy | 5,130 | 2,364 | 2,766 | 277 | 174 | 103 | 184 | 135 | 49 |
| Health Sciences, Other | 4,737 | 1,876 | 2,861 | 3,755 | 1,914 | 1,841 | 622 | 385 | 237 |
| **Home Economics & Vocational Home Ec** | 15,288 | 1,057 | 14,231 | 2,298 | 281 | 2,017 | 311 | 78 | 233 |
| **Law** | 11,197 | 419 | 778 | 1,924 | 1,441 | 483 | 54 | 48 | 6 |
| **Letters** | 35,434 | 12,165 | 23,269 | 6,291 | 2,169 | 4,122 | 1,215 | 543 | 672 |
| English, General | 24,352 | 8,005 | 16,347 | 3,882 | 1,326 | 2,556 | 710 | 301 | 409 |
| Literature, English | 1,345 | 501 | 844 | 261 | 74 | 187 | 72 | 30 | 42 |
| Speech, Debate & Forensic | 6,486 | 2,516 | 3,970 | 595 | 188 | 407 | 79 | 47 | 32 |
| Linguistics | 470 | 141 | 329 | 627 | 208 | 419 | 175 | 83 | 92 |
| Letters, Other | 2,781 | 1,002 | 1,779 | 926 | 373 | 553 | 179 | 82 | 97 |
| **Liberal/General Studies** | 19,248 | 8,644 | 10,604 | 1,154 | 448 | 706 | 38 | 26 | 12 |
| **Library & Archival Science** | 157 | 17 | 140 | 3,626 | 721 | 2,905 | 62 | 27 | 35 |
| **Life Sciences** | 38,524 | 19,993 | 18,531 | 5,013 | 2,616 | 2,397 | 3,358 | 2,229 | 1,129 |
| Biology, General | 27,618 | 14,135 | 13,483 | 2,173 | 1,131 | 1,042 | 574 | 382 | 192 |
| Biochemistry & Biophysics | 2,109 | 1,242 | 867 | 279 | 165 | 114 | 468 | 306 | 162 |
| Botany | 355 | 185 | 170 | 317 | 164 | 153 | 278 | 206 | 72 |
| Microbiology | 2,164 | 1,054 | 1,110 | 342 | 180 | 162 | 328 | 213 | 115 |
| Zoology | 3,140 | 1,702 | 1,438 | 829 | 478 | 351 | 936 | 650 | 286 |
| Life Sciences, Other | 3,183 | 1,675 | 1,463 | 1,073 | 498 | 575 | 774 | 472 | 302 |
| **Mathematics** | 16,306 | 8,725 | 7,581 | 3,159 | 2,047 | 1,112 | 742 | 618 | 124 |
| **Military Science & Technology** | 256 | 235 | 21 | 83 | 81 | 2 | 0 | 0 | 0 |
| **Multi-Interdisciplinary Studies** | 15,700 | 7,505 | 9,195 | 3,104 | 1,794 | 1,310 | 319 | 198 | 121 |
| **Parks & Recreation** | 4,433 | 1,663 | 2,770 | 497 | 234 | 261 | 39 | 26 | 13 |
| **Philosophy and Religion** | 6,239 | 4,161 | 2,078 | 1,163 | 713 | 450 | 477 | 373 | 104 |
| **Theology** | 5,602 | 4,127 | 1,475 | 4,467 | 2,869 | 1,598 | 1,183 | 1,066 | 117 |
| **Physical Sciences** | 21,620 | 15,693 | 5,927 | 5,896 | 4,467 | 1,429 | 3,551 | 2,963 | 588 |
| Astronomy | 98 | 81 | 17 | 79 | 68 | 11 | 63 | 58 | 5 |
| Astrophysics | 32 | 29 | 3 | 4 | 4 | 0 | 18 | 18 | 0 |
| Atmospheric Sci & Meteorology | 355 | 296 | 59 | 204 | 172 | 32 | 54 | 50 | 4 |
| Chemistry | 10,166 | 6,483 | 3,683 | 1,754 | 1,159 | 595 | 1,908 | 1,508 | 400 |
| Geology | 4,605 | 3,577 | 1,028 | 1,515 | 1,167 | 348 | 197 | 154 | 43 |
| Geochemistry, Geophysics & Seismology | 198 | 158 | 40 | 157 | 128 | 29 | 53 | 47 | 6 |
| Geological Sciences, Other | 171 | 136 | 35 | 95 | 65 | 30 | 21 | 14 | 7 |
| Oceanography | 166 | 134 | 32 | 135 | 101 | 34 | 83 | 73 | 10 |
| Earth Science | 576 | 417 | 159 | 128 | 84 | 44 | 41 | 35 | 6 |
| Physics | 4,180 | 3,569 | 611 | 1,501 | 1,277 | 224 | 1,010 | 919 | 91 |
| Physical Science, Other | 527 | 367 | 160 | 227 | 167 | 60 | 82 | 72 | 10 |
| Science Technologies | 111 | 76 | 35 | 6 | 3 | 3 | 0 | 0 | 0 |
| **Psychology** | 40,521 | 12,578 | 27,943 | 8,293 | 2,923 | 5,370 | 3,088 | 1,497 | 1,591 |
| **Protective Services** | 12,704 | 7,963 | 4,741 | 1,074 | 748 | 326 | 21 | 17 | 4 |
| Criminal Justice | 12,478 | 7,773 | 4,705 | 1,056 | 739 | 317 | 21 | 17 | 4 |
| Protective Services, Other | 226 | 190 | 36 | 18 | 9 | 9 | 0 | 0 | 0 |
| **Public Affairs** | 13,878 | 4,670 | 9,208 | 16,300 | 6,108 | 10,192 | 385 | 174 | 211 |
| **Social Sciences** | 93,703 | 52,654 | 41,049 | 10,428 | 6,339 | 4,089 | 2,955 | 1,970 | 985 |
| Anthropology | 2,594 | 962 | 1,632 | 713 | 307 | 406 | 373 | 182 | 191 |
| Archeology | 56 | 23 | 33 | 33 | 11 | 22 | 15 | 5 | 10 |
| Criminology | 1,097 | 651 | 446 | 69 | 43 | 26 | 0 | 0 | 0 |
| Economics | 21,602 | 14,163 | 7,439 | 1,937 | 1,434 | 503 | 789 | 632 | 157 |
| Geography | 3,056 | 2,129 | 927 | 564 | 352 | 212 | 131 | 90 | 41 |
| History | 16,413 | 10,409 | 6,004 | 1,959 | 1,168 | 791 | 496 | 331 | 166 |
| International Relations | 3,418 | 1,510 | 1,908 | 1,332 | 875 | 457 | 51 | 37 | 14 |
| Political Science & Govt. | 26,439 | 15,959 | 10,480 | 1,704 | 1,154 | 550 | 439 | 324 | 115 |
| Sociology | 12,271 | 3,811 | 8,460 | 965 | 429 | 536 | 504 | 277 | 227 |
| Social Sciences, Other | 2,526 | 1,181 | 1,234 | 699 | 341 | 358 | 125 | 73 | 52 |
| **Visual and Performing Arts** | 36,949 | 14,284 | 22,665 | 8,416 | 3,775 | 4,641 | 722 | 396 | 326 |
| Design | 4,571 | 1,789 | 2,782 | 291 | 137 | 154 | 0 | 0 | 0 |
| Dramatic Arts | 4,598 | 1,941 | 2,657 | 1,192 | 598 | 594 | 74 | 38 | 36 |
| Fine Arts | 14,752 | 4,724 | 10,028 | 2,727 | 988 | 1,739 | 154 | 46 | 108 |
| Music | 7,175 | 3,387 | 3,788 | 3,455 | 1,726 | 1,727 | 476 | 305 | 171 |
| Visual & Performing Arts, Other | 4,349 | 1,929 | 2,420 | 576 | 243 | 333 | 13 | 6 | 7 |

SOURCE: Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, 1984-85, U.S. Dept. of Education Office for Civil Rights, Unpublished.

## TABLE 2-16

DOCTORATES CONFERRED BY U.S. COLLEGES AND UNIVERSITIES* BY BROAD FIELD, RACE/ETHNICITY, SEX AND FIELD, 1984-85

| FIELD | TOTAL[1] | Women | Men | %W | Indian Women | Indian Men | %I | Black Women | Black Men | %B | Asian Women | Asian Men | %A | Hispanic Women | Hispanic Men | %H | White Women | White Men | %W | Non-Res Aliens Women | Non-Res Aliens Men | %NR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALL FIELDS | 32972 | 11258 | 21714 | 34.1 | 44 | 41 | 0.3 | 552 | 513 | 3.2 | 277 | 747 | 3.1 | 225 | 393 | 1.9 | 8560 | 14328 | 69.4 | 838 | 4211 | 15.3 |
| Agribusiness & Agri Prod | 194 | 31 | 163 | 16.0 | 0 | 0 | 0.0 | 0 | 9 | 4.6 | 1 | 16 | 8.8 | 1 | 4 | 2.6 | 14 | 89 | 53.1 | 11 | 39 | 25.8 |
| Agricultural Sciences | 823 | 115 | 708 | 14.0 | 0 | 1 | 0.1 | 1 | 9 | 1.2 | 5 | 32 | 4.5 | 1 | 11 | 1.5 | 86 | 430 | 62.7 | 20 | 219 | 29.0 |
| Renewable Natural Res. | 196 | 31 | 165 | 15.8 | 0 | 1 | 0.5 | 1 | 2 | 1.5 | 0 | 1 | 0.5 | 0 | 0 | 0.0 | 25 | 135 | 81.6 | 5 | 26 | 15.8 |
| Architecture, Env. Design | 89 | 23 | 66 | 25.8 | 0 | 0 | 0.0 | 1 | 4 | 5.6 | 1 | 3 | 4.5 | 0 | 1 | 1.1 | 17 | 36 | 59.6 | 4 | 22 | 29.2 |
| Area & Ethnic Studies | 137 | 51 | 86 | 37.2 | 0 | 0 | 0.0 | 0 | 3 | 2.2 | 3 | 4 | 5.1 | 2 | 6 | 5.8 | 41 | 64 | 76.6 | 5 | 5 | 7.3 |
| Business & Management | 564 | 146 | 718 | 16.9 | 1 | 2 | 0.3 | 5 | 7 | 1.4 | 3 | 30 | 3.8 | 0 | 3 | 0.3 | 110 | 446 | 64.4 | 19 | 179 | 22.9 |
| Communications | 228 | 90 | 138 | 39.5 | 0 | 0 | 0.0 | 10 | 8 | 7.9 | 0 | 1 | 0.4 | 1 | 0 | 0.4 | 64 | 91 | 68.0 | 8 | 25 | 14.5 |
| Communications Technologies | 6 | 1 | 5 | 16.7 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 1 | 3 | 66.7 | 0 | 1 | 16.7 |
| Computer & Info Sciences | 248 | 29 | 227 | 10.1 | 0 | 1 | 0.4 | 0 | 3 | 1.2 | 1 | 12 | 5.2 | 0 | 2 | 0.8 | 17 | 124 | 56.9 | 4 | 64 | 27.4 |
| Education | 7151 | 5732 | 1419 | 52.2 | 27 | 16 | 0.6 | 318 | 174 | 6.9 | 45 | 28 | 1.0 | 78 | 73 | 2.1 | 2843 | 2516 | 74.9 | 173 | 386 | 7.8 |
| Engineering | 3221 | 207 | 3014 | 6.4 | 1 | 3 | 0.1 | 5 | 29 | 1.1 | 19 | 220 | 7.7 | 1 | 81 | 2.5 | 100 | 1162 | 39.2 | 60 | 1251 | 40.7 |
| Engineering & Related Techs. | 9 | 1 | 8 | 11.1 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 1 | 11.1 | 1 | 6 | 77.8 | 0 | 1 | 11.1 |
| Foreign Languages | 437 | 253 | 184 | 57.9 | 1 | 1 | 0.5 | 5 | 4 | 1.1 | 2 | 3 | 1.1 | 18 | 23 | 9.4 | 179 | 119 | 68.2 | 25 | 20 | 10.3 |
| Allied Health | 57 | 32 | 25 | 56.1 | 0 | 1 | 1.8 | 1 | 2 | 5.3 | 2 | 2 | 7.0 | 1 | 0 | 1.8 | 28 | 19 | 82.5 | 0 | 1 | 1.8 |
| Health Services | 1142 | 602 | 540 | 52.7 | 2 | 4 | 0.5 | 15 | 11 | 2.3 | 20 | 26 | 4.0 | 9 | 6 | 1.3 | 489 | 381 | 76.2 | 44 | 92 | 11.9 |
| Home Economics[2] | 276 | 198 | 78 | 71.7 | 0 | 0 | 0.0 | 8 | 0 | 2.9 | 4 | 1 | 1.8 | 7 | 0 | 2.5 | 160 | 56 | 78.3 | 16 | 21 | 13.4 |
| Law | 105 | 17 | 88 | 16.2 | 0 | 0 | 0.0 | 1 | 2 | 2.9 | 0 | 0 | 0.0 | 0 | 1 | 1.0 | 16 | 51 | 63.8 | 0 | 15 | 14.3 |
| Letters | 1243 | 668 | 575 | 53.7 | 1 | 0 | 0.2 | 16 | 7 | 1.9 | 10 | 8 | 1.4 | 8 | 4 | 1.0 | 539 | 443 | 79.0 | 54 | 78 | 10.6 |
| Library/Archival Sciences | 140 | 73 | 67 | 52.1 | 1 | 0 | 0.7 | 7 | 2 | 6.4 | 3 | 4 | 5.0 | 1 | 0 | 0.7 | 52 | 49 | 72.1 | 5 | 10 | 10.7 |
| Life Sciences | 3436 | 1125 | 2311 | 32.7 | 2 | 2 | 0.1 | 20 | 32 | 1.5 | 47 | 79 | 3.7 | 28 | 37 | 1.9 | 853 | 1807 | 77.4 | 107 | 259 | 10.7 |
| Mathematics | 699 | 109 | 590 | 15.6 | 0 | 0 | 0.0 | 0 | 7 | 1.0 | 5 | 30 | 5.0 | 6 | 15 | 3.0 | 69 | 291 | 5.0 | 24 | 219 | 34.8 |
| Multi/Interdisciplinary | 285 | 108 | 177 | 37.9 | 0 | 0 | 0.0 | 2 | 4 | 2.1 | 4 | 9 | 4.6 | 3 | 5 | 2.8 | 82 | 104 | 65.3 | 4 | 33 | 13.0 |
| Parks & Recreation | 36 | 13 | 23 | 36.1 | 0 | 0 | 0.0 | 1 | 3 | 11.1 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 10 | 12 | 61.1 | 2 | 6 | 22.2 |
| Philosophy & Religion | 468 | 91 | 377 | 19.4 | 0 | 0 | 0.0 | 0 | 9 | 1.9 | 1 | 11 | 2.6 | 1 | 4 | 1.1 | 76 | 298 | 79.9 | 4 | 28 | 6.8 |
| Physical Sciences | 3394 | 554 | 2840 | 16.3 | 1 | 2 | 0.1 | 7 | 20 | 0.8 | 41 | 118 | 4.7 | 5 | 31 | 1.1 | 379 | 1927 | 67.9 | 88 | 563 | 19.2 |
| Psychology | 2925 | 1428 | 1497 | 48.8 | 1 | 2 | 0.1 | 55 | 45 | 3.4 | 22 | 21 | 1.5 | 24 | 22 | 1.6 | 1161 | 1213 | 81.2 | 33 | 56 | 3.0 |
| Protective Services | 33 | 6 | 27 | 18.2 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 1 | 0 | 3.0 | 0 | 0 | 0.0 | 4 | 21 | 75.8 | 1 | 0 | 3.0 |
| Public Affairs | 431 | 218 | 213 | 50.6 | 0 | 3 | 0.7 | 17 | 16 | 7.7 | 4 | 5 | 2.1 | 6 | 3 | 2.1 | 152 | 126 | 64.5 | 8 | 27 | 8.1 |
| Social Services | 2851 | 918 | 1933 | 32.2 | 3 | 1 | 0.1 | 39 | 57 | 3.4 | 19 | 19 | 2.0 | 19 | 44 | 2.2 | 670 | 1202 | 65.7 | 95 | 459 | 19.4 |
| Theology | 1140 | 104 | 1036 | 9.1 | 0 | 0 | 0.0 | 9 | 37 | 4.0 | 6 | 29 | 3.1 | 0 | 9 | 0.8 | 86 | 766 | 74.7 | 1 | 77 | 6.8 |
| Visual & Performing Arts | 693 | 286 | 407 | 41.3 | 1 | 1 | 0.3 | 8 | 7 | 2.2 | 8 | 4 | 1.7 | 5 | 7 | 1.7 | 234 | 330 | 81.4 | 18 | 28 | 6.6 |
| All Other | 15 | 2 | 13 | 13.3 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 1 | 6.7 | 0 | 0 | 0.0 | 2 | 11 | 86.7 | 0 | 1 | 6.7 |

Note: Table includes data from the Trust Territories and Puerto Rico.
(1) Totals include those who did not designate racial/ethnic origin.
(2) Includes Vocational Home Economics.

SOURCE: Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, 1984-85, U.S. Dept. of Education Office for Civil Rights, Unpublished.

## TABLE 2-16 (continued)

MASTER'S DEGREES CONFERRED BY U.S. COLLEGES AND UNIVERSITIES[a] BY BROAD FIELD, RACE/ETHNICITY, SEX AND FIELD, 1984-85

| FIELD | TOTAL[1] | Women | Men | %W | Indian | | | Black | | | Asian | | | Hispanic | | | White | | | Non-Res Aliens | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Women | Men | %I | Women | Men | %B | Women | Men | %A | Women | Men | %H | Women | Men | %W | Women | Men | %NR |
| ALL FIELDS | 287213 | 143497 | 143716 | 50.0 | 548 | 487 | 0.4 | 8301 | 4796 | 4.6 | 2733 | 4471 | 2.5 | 3621 | 2801 | 2.2 | 112788 | 100209 | 74.2 | 6920 | 18631 | 8.9 |
| Agribusiness & Agri Prod | 798 | 178 | 620 | 22.3 | 0 | 0 | 0.0 | 4 | 19 | 2.9 | 4 | 13 | 2.1 | 5 | 8 | 1.6 | 125 | 383 | 63.7 | 33 | 172 | 25.7 |
| Agricultural Sciences | 2093 | 652 | 1441 | 31.2 | 1 | 3 | 0.2 | 18 | 26 | 2.1 | 14 | 35 | 2.3 | 8 | 31 | 1.9 | 505 | 919 | 68.0 | 94 | 390 | 23.1 |
| Renewable Natural Res. | 1059 | 253 | 806 | 23.9 | 1 | 1 | 0.2 | 2 | 4 | 0.6 | 2 | 7 | 0.8 | 3 | 8 | 1.0 | 223 | 685 | 85.7 | 20 | 92 | 10.6 |
| Architecture, Env. Design | 3281 | 1128 | 2153 | 34.4 | 0 | 10 | 0.3 | 43 | 80 | 3.7 | 40 | 74 | 3.5 | 20 | 67 | 2.7 | 839 | 1395 | 68.1 | 138 | 460 | 18.2 |
| Area & Ethnic Studies | 884 | 417 | 467 | 47.2 | 2 | 5 | 0.8 | 21 | 18 | 4.4 | 29 | 18 | 5.3 | 25 | 24 | 5.5 | 250 | 240 | 55.4 | 55 | 54 | 12.3 |
| Business & Management | 67592 | 20915 | 46677 | 30.9 | 73 | 158 | 0.3 | 941 | 1365 | 3.4 | 565 | 1290 | 2.7 | 341 | 715 | 1.6 | 16383 | 34566 | 75.4 | 1139 | 4316 | 8.1 |
| Business & Office | 16 | 12 | 4 | 75.0 | 0 | 0 | 0.0 | 3 | 1 | 25.0 | 0 | 0 | 0.0 | 1 | 1 | 12.5 | 6 | 1 | 43.8 | 1 | 1 | 1.0 |
| Marketing & Distribution | 50 | 22 | 28 | 44.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 4 | 8.0 | 1 | 0 | 2.0 | 18 | 13 | 62.0 | 3 | 9 | 24.0 |
| Communications | 3460 | 2013 | 1447 | 58.2 | 7 | 2 | 0.3 | 111 | 55 | 4.8 | 21 | 20 | 1.2 | 46 | 18 | 1.8 | 1557 | 1045 | 75.2 | 173 | 177 | 10.1 |
| Communications Technologies | 209 | 80 | 129 | 38.3 | 0 | 0 | 0.0 | 5 | 3 | 3.8 | 1 | 2 | 1.4 | 1 | 2 | 1.4 | 57 | 73 | 62.2 | 2 | 5 | 3.3 |
| Computer & Info Sciences | 7101 | 2037 | 5064 | 28.7 | 12 | 28 | 0.6 | 70 | 105 | 2.5 | 199 | 390 | 8.3 | 28 | 65 | 1.3 | 1210 | 2958 | 58.7 | 431 | 1252 | 23.7 |
| Education | 76398 | 55395 | 21003 | 72.5 | 248 | 100 | 0.5 | 4260 | 1270 | 7.2 | 522 | 214 | 1.0 | 1774 | 630 | 3.1 | 44518 | 16344 | 79.7 | 1404 | 1365 | 3.6 |
| Engineering | 20935 | 2243 | 18692 | 10.7 | 3 | 29 | 0.2 | 54 | 243 | 1.4 | 166 | 1303 | 7.0 | 36 | 259 | 1.4 | 1448 | 9892 | 54.2 | 339 | 4970 | 25.4 |
| Engineering & Related Techs. | 607 | 62 | 545 | 10.2 | 0 | 2 | 0.3 | 4 | 24 | 4.6 | 1 | 21 | 3.6 | 0 | 3 | 0.5 | 44 | 347 | 64.4 | 7 | 91 | 16.1 |
| Foreign Languages | 1745 | 1183 | 562 | 67.8 | 3 | 1 | 0.2 | 15 | 9 | 1.4 | 22 | 4 | 1.5 | 121 | 47 | 9.6 | 803 | 374 | 67.4 | 143 | 94 | 13.6 |
| Allied Health | 2924 | 2226 | 698 | 76.1 | 5 | 0 | 0.2 | 120 | 41 | 5.5 | 23 | 18 | 1.4 | 35 | 12 | 1.6 | 1811 | 538 | 80.3 | 49 | 28 | 2.6 |
| Health Services | 14601 | 11144 | 3457 | 76.3 | 41 | 14 | 0.4 | 481 | 118 | 4.1 | 252 | 135 | 2.7 | 161 | 70 | 1.6 | 9187 | 2447 | 79.7 | 338 | 366 | 4.8 |
| Home Economics[2] | 2383 | 2104 | 279 | 88.3 | 9 | 0 | 0.4 | 106 | 15 | 5.1 | 51 | 4 | 2.3 | 39 | 0 | 1.6 | 1707 | 217 | 80.7 | 133 | 28 | 6.8 |
| Law | 1796 | 419 | 1377 | 23.3 | 1 | 2 | 0.2 | 21 | 40 | 3.4 | 13 | 34 | 2.6 | 15 | 24 | 2.2 | 282 | 926 | 67.3 | 79 | 334 | 23.0 |
| Letters | 5951 | 3883 | 2068 | 65.2 | 12 | 9 | 0.4 | 97 | 42 | 2.3 | 73 | 26 | 1.7 | 62 | 31 | 1.6 | 3074 | 1619 | 78.9 | 321 | 211 | 8.9 |
| Library/Archival Sciences | 5093 | 3884 | 1209 | 76.3 | 9 | 4 | 0.3 | 173 | 33 | 4.0 | 66 | 16 | 1.6 | 59 | 28 | 1.7 | 3310 | 997 | 84.6 | 114 | 79 | 3.8 |
| Life Sciences | 5091 | 2429 | 2662 | 47.7 | 6 | 5 | 0.2 | 81 | 64 | 2.8 | 84 | 81 | 3.2 | 58 | 42 | 2.0 | 1889 | 2055 | 77.5 | 181 | 279 | 9.0 |
| Mathematics | 2888 | 1011 | 1877 | 35.0 | 3 | 3 | 0.2 | 18 | 32 | 1.7 | 55 | 106 | 5.6 | 18 | 25 | 1.5 | 691 | 1134 | 63.2 | 182 | 470 | 22.6 |
| Multi/Interdiciplinary | 3184 | 1339 | 1845 | 42.1 | 7 | 2 | 0.3 | 51 | 28 | 2.5 | 16 | 19 | 1.1 | 19 | 28 | 1.5 | 949 | 885 | 57.6 | 66 | 72 | 4.3 |
| Parks & Recreation | [illegible] | 303 | 241 | 7.0 | 1 | 0 | 6.0 | 12 | 6 | 7.0 | 1 | 3 | 0.7 | 6 | 1 | 27.0 | 274 | 206 | 25.0 | 5 | 22 | 5.0 |
| Philosophy & Religion | 1168 | 467 | 701 | 40.0 | 0 | 2 | 0.2 | 7 | 19 | 2.2 | 6 | 22 | 2.4 | 7 | 10 | 1.5 | 395 | 517 | 78.1 | 27 | 72 | 8.5 |
| Physical Sciences | 5802 | 1352 | 4450 | 23.3 | 1 | 14 | 0.3 | 24 | 53 | 1.3 | 58 | 140 | 3.4 | 19 | 79 | 1.7 | 962 | 3010 | 68.5 | 198 | 852 | 18.1 |
| Psychology | 8481 | 5417 | 3064 | 63.9 | 19 | 11 | 0.4 | 266 | 138 | 4.8 | 73 | 42 | 1.4 | 140 | 101 | 2.8 | 4282 | 2432 | 79.2 | 167 | 107 | 3.2 |
| Protective Services | 1265 | 401 | 864 | 31.7 | 2 | 1 | 0.2 | 72 | 83 | 12.3 | 0 | 7 | 0.6 | 11 | 20 | 2.5 | 267 | 664 | 73.6 | 5 | 35 | 3.2 |
| Public Affairs | 15904 | 10196 | 5708 | 64.1 | 47 | 29 | 0.5 | 898 | 464 | 8.6 | 145 | 90 | 1.5 | 366 | 180 | 3.4 | 7775 | 3794 | 72.7 | 190 | 413 | 3.8 |
| Social Services | 10392 | 3987 | 6405 | 38.4 | 12 | 17 | 0.3 | 180 | 221 | 3.9 | 85 | 211 | 2.8 | 103 | 146 | 2.4 | 2889 | 4149 | 67.7 | 476 | 1246 | 16.6 |
| Theology | 4352 | 1506 | 2846 | 34.6 | 1 | 3 | 0.1 | 29 | 61 | 2.1 | 16 | 42 | 1.3 | 17 | 44 | 1.4 | 1188 | 2062 | 74.7 | 80 | 262 | 7.9 |
| Visual & Performing Arts | 8710 | 4816 | 3894 | 55.3 | 22 | 12 | 0.4 | 114 | 98 | 2.4 | 130 | 78 | 2.4 | 78 | 70 | 1.7 | 3850 | 3053 | 79.3 | 325 | 293 | 7.1 |
| All Other | 456 | 23 | 433 | 5.0 | 0 | 0 | 0.0 | 0 | 18 | 3.9 | 0 | 2 | 0.4 | 0 | 12 | 2.6 | 20 | 269 | 63.4 | 2 | 14 | 3.5 |

Note: Table includes data from the Trust Territories and Puerto Rico

(1) Totals include those who did not designate racial/ethnic origin.

(2) Includes Vocational Home Economics.

SOURCE: Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, 1984-85, U.S. Dept. of Education Office for Civil Rights, Unpublished.

## TABLE 2-16 (continued)

BACHELOR'S DEGREES CONFERRED BY U.S. COLLEGES AND UNIVERSITIES* BY BROAD FIELD, RACE/ETHNICITY, SEX AND FIELD, 1984-85

| FIELD | TOTAL(1) | Women | Men | %W | Indian | | | Black | | | Asian | | | Hispanic | | | White | | | Non-Res Aliens | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Women | Men | %I | Women | Men | %B | Women | Men | %A | Women | Men | %H | Women | Men | %W | Women | Men | %NR |
| ALL FIELDS | 852139 | 505068 | 486409 | 59.3 | 2062 | 1864 | 0.5 | 33168 | 22305 | 6.5 | 11293 | 12952 | 2.8 | 13807 | 12196 | 3.1 | 408356 | 390444 | 93.7 | 8545 | 19105 | 3.2 |
| Agribusiness & Agri Prod | 5765 | 1293 | 4472 | 22.4 | 5 | 10 | 0.3 | 53 | 95 | 2.6 | 21 | 54 | 1.3 | 14 | 48 | 1.1 | 1132 | 4013 | 89.2 | 23 | 195 | 3.8 |
| Agricultural Sciences | 8713 | 3168 | 5545 | 36.4 | 13 | 20 | 0.4 | 54 | 168 | 2.5 | 56 | 64 | 1.4 | 52 | 86 | 1.6 | 2880 | 4778 | 87.9 | 60 | 322 | 4.4 |
| Renewable Natural Res. | 3615 | 1077 | 2538 | 29.8 | 5 | 16 | 0.6 | 7 | 20 | 0.7 | 22 | 20 | 1.2 | 11 | 28 | 1.1 | 997 | 2385 | 93.6 | 9 | 40 | 1.4 |
| Architecture, Env. Design | 9342 | 3310 | 6032 | 35.4 | 11 | 22 | 0.4 | 111 | 213 | 3.5 | 112 | 180 | 3.1 | 103 | 221 | 3.5 | 2713 | 4815 | 80.6 | 164 | 373 | 5.7 |
| Area & Ethnic Studies | 2872 | 1769 | 1103 | 61.6 | 6 | 8 | 0.5 | 134 | 78 | 7.4 | 88 | 41 | 4.5 | 96 | 64 | 5.6 | 1338 | 849 | 76.1 | 49 | 19 | 2.4 |
| Business & Management | 227971 | 101275 | 126696 | 44.4 | 371 | 430 | 0.4 | 7536 | 5805 | 5.9 | 2455 | 2443 | 2.1 | 2708 | 2978 | 2.5 | 80500 | 102535 | 80.3 | 2140 | 4633 | 3.0 |
| Business & Office | 4668 | 3547 | 1121 | 76.0 | 10 | 5 | 0.3 | 517 | 93 | 13.1 | 21 | 26 | 1.0 | 109 | 37 | 3.1 | 2234 | 862 | 66.3 | 66 | 37 | 2.2 |
| Marketing & Distribution | 3813 | 2245 | 1568 | 58.9 | 3 | 3 | 0.2 | 153 | 68 | 5.8 | 13 | 13 | 0.7 | 32 | 23 | 1.4 | 1946 | 1401 | 87.8 | 26 | 46 | 1.9 |
| Communications | 40569 | 24192 | 16377 | 59.6 | 87 | 52 | 0.3 | 1807 | 1082 | 7.1 | 328 | 178 | 1.2 | 500 | 328 | 2.0 | 20084 | 13802 | 83.5 | 290 | 228 | 1.3 |
| Communications Technologies | 1725 | 805 | 920 | 46.7 | 1 | 2 | 0.2 | 96 | 65 | 9.3 | 10 | 5 | 0.9 | 15 | 16 | 1.8 | 583 | 644 | 71.1 | 22 | 56 | 4.5 |
| Computer & Info Sciences | 38117 | 14427 | 23690 | 37.8 | 60 | 74 | 0.4 | 1084 | 1003 | 5.5 | 857 | 1113 | 5.2 | 334 | 466 | 2.1 | 10872 | 18720 | 77.6 | 649 | 1408 | 5.4 |
| Education | 90511 | 68725 | 21786 | 75.9 | 299 | 157 | 0.5 | 3704 | 1517 | 5.8 | 531 | 246 | 0.9 | 2270 | 669 | 3.2 | 57371 | 17547 | 82.8 | 533 | 435 | 1.1 |
| Engineering | 77567 | 11241 | 66326 | 14.5 | 34 | 156 | 0.2 | 550 | 1430 | 2.6 | 821 | 3529 | 5.6 | 269 | 1495 | 2.3 | 8663 | 51231 | 77.2 | 453 | 5479 | 7.6 |
| Engineering Technologies | 19008 | 1450 | 17558 | 7.6 | 9 | 76 | 0.4 | 144 | 889 | 5.4 | 36 | 438 | 2.5 | 32 | 395 | 2.2 | 1097 | 13861 | 78.7 | 57 | 1038 | 5.8 |
| Foreign Languages | 10090 | 7413 | 2677 | 73.5 | 15 | 2 | 0.2 | 209 | 81 | 2.9 | 150 | 41 | 1.9 | 534 | 228 | 7.6 | 5850 | 2080 | 78.6 | 201 | 85 | 2.8 |
| Allied Health | 14413 | 11825 | 2588 | 82.0 | 42 | 19 | 0.4 | 577 | 165 | 5.1 | 219 | 48 | 1.9 | 281 | 66 | 2.4 | 9985 | 2071 | 83.6 | 116 | 52 | 1.2 |
| Health Services | 51239 | 43886 | 7353 | 85.6 | 167 | 30 | 0.4 | 2656 | 316 | 5.8 | 739 | 232 | 1.9 | 1040 | 253 | 2.5 | 36123 | 5805 | 81.8 | 389 | 215 | 1.2 |
| Home Economics(2) | 15654 | 14641 | 1013 | 93.5 | 66 | 5 | 0.5 | 837 | 93 | 5.9 | 277 | 18 | 1.9 | 210 | 25 | 1.5 | 12511 | 838 | 85.3 | 211 | 15 | 1.4 |
| Law | 1171 | 710 | 461 | 60.6 | 2 | 2 | 0.3 | 43 | 40 | 7.1 | 10 | 18 | 2.4 | 26 | 22 | 4.1 | 586 | 369 | 81.6 | 3 | 1 | 0.3 |
| Letters | 34214 | 22521 | 11693 | 65.8 | 73 | 44 | 0.3 | 1093 | 446 | 4.5 | 316 | 138 | 1.3 | 410 | 224 | 1.9 | 19247 | 10119 | 85.8 | 325 | 128 | 1.3 |
| Library/General Studies | 19416 | 10811 | 8605 | 55.7 | 60 | 24 | 0.4 | 961 | 487 | 7.4 | 179 | 119 | 1.5 | 499 | 217 | 3.7 | 8184 | 5374 | 69.8 | 134 | 180 | 1.6 |
| Life Sciences | 39504 | 18869 | 20635 | 47.8 | 68 | 85 | 0.4 | 1198 | 974 | 5.5 | 881 | 973 | 4.7 | 572 | 667 | 3.1 | 14578 | 16234 | 78.0 | 286 | 484 | 1.9 |
| Mathematics | 15287 | 7036 | 8251 | 46.0 | 22 | 34 | 0.4 | 392 | 365 | 5.0 | 396 | 483 | 5.7 | 108 | 139 | 1.6 | 5555 | 6336 | 77.8 | 276 | 458 | 4.8 |
| Multi/Interdiciplinary | 15867 | 8292 | 7575 | 52.3 | 37 | 55 | 0.6 | 525 | 345 | 5.5 | 249 | 220 | 3.0 | 186 | 164 | 2.2 | 6642 | 6293 | 81.5 | 94 | 124 | 1.4 |
| Parks & Recreation | 4610 | 2861 | 1749 | 62.1 | 6 | 8 | 0.3 | 87 | 103 | 4.1 | 36 | 23 | 1.2 | 34 | 19 | 1.1 | 2593 | 1520 | 89.2 | 11 | 12 | 0.5 |
| Philosophy & Religion | 6373 | 2181 | 4192 | 34.2 | 13 | 9 | 0.3 | 82 | 171 | 4.0 | 27 | 73 | 1.6 | 40 | 28 | 1.1 | 1890 | 3553 | 85.4 | 22 | 72 | 1.5 |
| Physical Sciences | 24876 | 7707 | 17169 | 31.0 | 30 | 60 | 0.4 | 366 | 435 | 3.2 | 248 | 482 | 2.9 | 112 | 313 | 1.7 | 6410 | 14537 | 84.2 | 194 | 559 | 3.0 |
| Psychology | 40356 | 27422 | 12934 | 68.0 | 107 | 83 | 0.5 | 1815 | 700 | 6.2 | 533 | 262 | 2.0 | 881 | 405 | 3.2 | 22158 | 10452 | 80.8 | 323 | 279 | 1.5 |
| Protective Services | 12530 | 4824 | 7706 | 38.5 | 30 | 31 | 0.5 | 979 | 906 | 15.0 | 36 | 83 | 0.9 | 244 | 419 | 5.3 | 3330 | 5812 | 73.0 | 16 | 106 | 1.0 |
| Public Affairs | 12283 | 9364 | 2919 | 76.2 | 84 | 25 | 0.9 | 1395 | 416 | 14.7 | 89 | 33 | 1.0 | 312 | 108 | 3.4 | 6639 | 2016 | 70.5 | 89 | 66 | 1.3 |
| Social Services | 92432 | 40695 | 51737 | 44.0 | 197 | 212 | 0.4 | 3175 | 2824 | 6.5 | 964 | 963 | 2.1 | 1307 | 1522 | 3.1 | 32144 | 42367 | 80.6 | 773 | 1347 | 2.3 |
| Theology | 6079 | 1638 | 4441 | 26.9 | 8 | 8 | 0.3 | 39 | 165 | 3.4 | 24 | 51 | 1.2 | 30 | 81 | 1.8 | 1281 | 3366 | 76.4 | 47 | 122 | 2.8 |
| Visual & Perf Arts | 37779 | 23339 | 14440 | 61.8 | 120 | 86 | 0.5 | 788 | 681 | 3.9 | 543 | 321 | 2.3 | 420 | 369 | 2.1 | 19845 | 11717 | 83.5 | 488 | 388 | 2.3 |
| All Other | 3048 | 509 | 2539 | 16.7 | 1 | 11 | 0.4 | 21 | 66 | 2.9 | 8 | 22 | 1.0 | 16 | 73 | 2.9 | 390 | 2242 | 83.2 | 6 | 103 | 3.6 |

Note: Table includes data from the Trust Teritories and Puerto Rico

(1) Totals include those who did not designate racial/ethnic origin.

(2) Includes Vocational Home Economics.

SOURCE: Office for Civil Rights of the Department of Education, 1984-85 Degree Data, unpublished

## TABLE 2-17

BACHELOR'S DEGREES AWARDED IN SCIENCE AND ENGINEERING BY FIELD AND RACE/ETHNICITY, 1984-85

| FIELD | TOTAL(1) | Indian No. | Indian % | Black No. | Black % | Asian No. | Asian % | Hispanic No. | Hispanic % | Non-Res Alien No. | Non-Res Alien % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Engineering | 77567 | 190 | 0.2 | 1980 | 2.6 | 4350 | 5.6 | 1764 | 2.3 | 5932 | 7.6 |
| Agricultural Sciences | 8713 | 33 | 0.4 | 222 | 2.5 | 120 | 1.4 | 138 | 1.6 | 382 | 4.4 |
| Life Sciences | 39504 | 153 | 0.4 | 2172 | 5.5 | 1854 | 4.7 | 1239 | 3.1 | 770 | 1.9 |
| Mathematics | 15287 | 56 | 0.4 | 757 | 5.0 | 879 | 5.7 | 247 | 1.6 | 734 | 4.8 |
| Computer & Info Sciences | 38117 | 134 | 0.4 | 2087 | 5.5 | 1970 | 5.2 | 800 | 2.1 | 2057 | 5.4 |
| Physical Sciences | 24876 | 90 | 0.4 | 801 | 3.2 | 730 | 2.9 | 425 | 1.7 | 753 | 3.0 |
| Psychology | 40356 | 190 | 0.5 | 2515 | 6.2 | 795 | 2.0 | 1286 | 3.2 | 602 | 1.5 |
| Social Sciences | 92432 | 409 | 0.4 | 5999 | 6.5 | 1926 | 2.1 | 2829 | 3.1 | 2120 | 2.3 |
| Total Science/Engineering | 336852 | 1255 | 0.4 | 16533 | 4.9 | 12624 | 3.7 | 8728 | 2.6 | 13350 | 4.0 |
| ALL FIELDS | 852139 | 3926 | 0.5 | 55473 | 6.5 | 24245 | 2.8 | 26003 | 3.1 | 27650 | 3.2 |

Note: Table includes data from the Trust Teritories and Puerto Rico
(1) Totals include those who did not designate racial/ethnic origin.

## TABLE 2-18

MASTER'S DEGREES AWARDED IN SCIENCE AND ENGINEERING BY FIELD AND RACE/ETHNICITY, 1984-85

| FIELD | TOTAL(1) | Indian No. | Indian % | Black No. | Black % | Asian No. | Asian % | Hispanic No. | Hispanic % | Non-Res Alien No. | Non-Res Alien % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Engineering | 20935 | 32 | 0.2 | 297 | 1.4 | 1469 | 7.0 | 295 | 1.4 | 5309 | 25.4 |
| Agricultural Sciences | 2093 | 4 | 0.2 | 44 | 2.1 | 49 | 2.3 | 39 | 1.9 | 484 | 23.1 |
| Life Sciences | 5091 | 11 | 0.2 | 145 | 2.8 | 165 | 3.2 | 100 | 2.0 | 460 | 9.0 |
| Mathematics | 2888 | 6 | 0.2 | 50 | 1.7 | 161 | 5.6 | 43 | 1.5 | 652 | 22.6 |
| Computer & Info Sciences | 7101 | 40 | 0.6 | 175 | 2.5 | 589 | 8.3 | 93 | 1.3 | 1683 | 23.7 |
| Physical Sciences | 5802 | 15 | 0.3 | 77 | 1.3 | 198 | 3.4 | 98 | 1.7 | 1050 | 18.1 |
| Psychology | 8481 | 30 | 0.4 | 404 | 4.8 | 115 | 1.4 | 241 | 2.8 | 274 | 3.2 |
| Social Sciences | 10392 | 29 | 0.3 | 401 | 3.9 | 296 | 2.8 | 249 | 2.4 | 1722 | 16.6 |
| Total Science/Engineering | 62783 | 167 | 0.3 | 1593 | 2.5 | 3042 | 4.8 | 1158 | 1.8 | 11634 | 18.5 |
| ALL FIELDS | 287213 | 1035 | 0.4 | 13097 | 4.6 | 7204 | 2.5 | 6422 | 2.2 | 25551 | 8.9 |

Note: Table includes data from the Trust Teritories and Puerto Rico
(1) Totals include those who did not designate racial/ethnic origin.

SOURCE: Women and Minorities in Science and Engineering, National Science Foundation, 1986 and Earned Degrees, 1982-85, Center for Statistics, Unpublished

## TABLE 2-19

### GRADUATE DEGREE ATTAINMENT RATES IN SCIENCE AND ENGINEERING, BY SEX, 1972-85

| Bachelor's | | Master's | | Attainment | Bachelor's | | Ph.D.s | | Attainment |
|---|---|---|---|---|---|---|---|---|---|
| Year | Number | Year | Number | Rate | Year | Number | Year | Number | Rate |
| | | | | Men | | | | | |
| 1970 | 195,244 | 1972 | 44,010 | 22.5 | 1965 | 128,723 | 1972 | 16,906 | 13.1 |
| 1971 | 198,180 | 1973 | 44,474 | 22.4 | 1966 | 133,989 | 1973 | 16,551 | 12.4 |
| 1972 | 203,557 | 1974 | 43,630 | 21.4 | 1967 | 143,847 | 1974 | 15,706 | 10.7 |
| 1973 | 211,552 | 1975 | 42,847 | 20.3 | 1968 | 158,711 | 1975 | 15,522 | 9.8 |
| 1974 | 213,269 | 1976 | 42,675 | 20.0 | 1969 | 181,323 | 1976 | 14,883 | 8.2 |
| 1975 | 201,578 | 1977 | 43,577 | 21.6 | 1970 | 195,244 | 1977 | 14,311 | 7.3 |
| 1976 | 196,577 | 1978 | 42,547 | 21.6 | 1971 | 198,180 | 1978 | 13,735 | 6.9 |
| 1977 | 191,090 | 1979 | 40,416 | 21.2 | 1972 | 203,557 | 1979 | 13,662 | 6.7 |
| 1978 | 188,107 | 1980 | 40,010 | 21.3 | 1973 | 211,552 | 1980 | 13,398 | 6.3 |
| 1979 | 186,333 | 1981 | 38,835 | 20.8 | 1974 | 213,269 | 1981 | 13,610 | 6.4 |
| 1980 | 186,009 | 1982 | 40,020 | 21.5 | 1975 | 201,578 | 1982 | 13,483 | 6.7 |
| 1981 | 184,421 | 1983 | 40,857 | 22.1 | 1976 | 196,577 | 1983 | 13,464 | 6.8 |
| 1982 | 186,995 | 1984 | 41,479 | 22.2 | 1977 | 191,090 | 1984 | 13,501 | 7.1 |
| 1983 | 190,508 | 1985 | 42,570 | 22.3 | 1978 | 188,107 | 1985 | 13,602 | 7.2 |
| | | | | Women | | | | | |
| 1970 | 68,878 | 1972 | 9,557 | 13.9 | 1965 | 36,213 | 1972 | 2,103 | 5.8 |
| 1971 | 72,996 | 1973 | 9,760 | 13.4 | 1966 | 39,482 | 1973 | 2,450 | 6.2 |
| 1972 | 77,671 | 1974 | 10,545 | 13.6 | 1967 | 44,002 | 1974 | 2,607 | 5.9 |
| 1973 | 83,839 | 1975 | 11,005 | 13.1 | 1968 | 53,463 | 1975 | 2,836 | 5.3 |
| 1974 | 91,793 | 1976 | 12,072 | 13.2 | 1969 | 63,196 | 1976 | 2,981 | 4.7 |
| 1975 | 93,342 | 1977 | 13,154 | 14.1 | 1970 | 68,878 | 1977 | 3,107 | 4.5 |
| 1976 | 95,597 | 1978 | 13,690 | 14.3 | 1971 | 72,996 | 1978 | 3,313 | 4.5 |
| 1977 | 97,453 | 1979 | 14,040 | 14.4 | 1972 | 77,671 | 1979 | 3,583 | 4.6 |
| 1978 | 100,060 | 1980 | 14,383 | 14.4 | 1973 | 83,839 | 1980 | 3,801 | 4.5 |
| 1979 | 102,292 | 1981 | 14,875 | 14.5 | 1974 | 91,793 | 1981 | 4,023 | 4.4 |
| 1980 | 105,974 | 1982 | 15,768 | 14.9 | 1975 | 93,342 | 1982 | 4,143 | 4.4 |
| 1981 | 108,442 | 1982 | 16,873 | 15.8 | 1976 | 95,597 | 1983 | 4,468 | 4.7 |
| 1982 | 111,473 | 1984 | 17,396 | 15.6 | 1977 | 97,453 | 1984 | 4,574 | 4.7 |
| 1983 | 115,358 | 1985 | 18,018 | 15.6 | 1978 | 100,060 | 1985 | 4,653 | 4.7 |

SOURCE: Foreign Citizens in U.S. Science and Engineering: History, Status, and Outlook, National Science Foundation, 1987; and Office for Civil Rights, Department of Education, unpublished data, 1987

## TABLE 2-20

PERCENT OF U.S. DEGREES IN SCIENCE/ENGINEERING FIELDS AWARDED TO NONRESIDENT ALIENS , BY FIELD AND LEVEL, SELECTED YEARS 1976-85

| | 1976 | | | 1979 | | | 1981 | | | 1983 | | | 1985 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIELD | B.S. | M.S. | PhD | B.S. | M.S. | PhD | B.S. | M.S. | PhD | B.S. | M.S. | PhD | B.S | M.S. | PhD |
| Total All Fields | 1.6 | 5.2 | 12.0 | 1.9 | 6.5 | 12.0 | 2.4 | 7.5 | 12.8 | 2.6 | 8.2 | 13.7 | 3.2 | 8.9 | 15.3 |
| **All Science/Eng.** | **2.3** | **11.8** | **16.4** | **3.0** | **14.5** | **15.7** | **3.9** | **16.6** | **16.3** | **3.8** | **18.3** | **17.8** | **4.0** | **18.5** | **20.0** |
| Agriculture | 1.6 | 16.9 | 28.8 | 2.1 | 18.2 | 28.2 | 2.8 | 17.7 | 32.1 | 3.3 | 20.0 | 24.6 | 4.4 | 23.1 | 29.0 |
| Biological Sci. | 1.7 | 6.2 | 10.7 | 1.8 | 6.8 | 9.7 | 2.1 | 6.2 | 7.8 | 2.2 | 7.5 | 8.6 | 1.9 | 9.0 | 10.7 |
| Computer/Info Sci. | 3.9 | 12.5 | 18.9 | 4.3 | 15.6 | 20.3 | 5.2 | 21.8 | 20.6 | 5.0 | 22.0 | 24.4 | 5.4 | 23.7 | 27.4 |
| Engineering | 7.0 | 22.0 | 34.9 | 7.7 | 25.9 | 34.8 | 9.4 | 27.9 | 37.5 | 7.7 | 27.5 | 41.0 | 7.6 | 25.4 | 40.7 |
| Mathematics | 1.9 | 7.8 | 18.9 | 3.1 | 15.6 | 22.2 | 4.1 | 18.1 | 23.8 | 4.9 | 23.2 | 27.6 | 4.8 | 22.6 | 34.8 |
| Physical Sciences | 2.4 | 11.8 | 16.9 | 3.0 | 13.1 | 15.7 | 3.1 | 15.0 | 16.9 | 3.2 | 14.9 | 17.0 | 3.0 | 18.1 | 19.2 |
| Psychology | 1.0 | 2.5 | 3.6 | 1.0 | 2.0 | 2.8 | 1.2 | 3.4 | 3.2 | 1.5 | 4.7 | 3.9 | 1.5 | 3.2 | 3.0 |
| Social Sciences | 1.4 | 8.2 | 12.6 | 1.6 | 11.6 | 12.8 | 2.0 | 13.4 | 13.4 | 2.2 | 16.3 | 15.6 | 2.3 | 16.6 | 19.4 |

FIELD: Professional Fields

SOURCE: Doctorates Awarded from 1920 to 1971 by Subfield of Doctorate, Sex and Decade, March 1973, and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 3-1

### DOCTORATES AWARDED IN PROFESSIONAL FIELDS FROM 1920 TO 1986 BY SUBFIELD OF DOCTORATE AND SEX

| SUBFIELD | CY 1920-FY 1972 | | | FY 1973-FY 1982 | | | FY 1983-FY 1984 | | | FY 1985 | | | FY 1986 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W |
| PROFESSIONAL FIELDS, TOTAL | 15,032 | 1,634 | 10.9 | 15,933 | 3,798 | 23.8 | 3,645 | 1,108 | 30.4 | 1,856 | 595 | 32.1 | 1,936 | 659 | 34.0 |
| BUSINESS ADMINISTRATION, SUBTOTAL(1) | 6,399 | 170 | 2.7 | 10,048 | 1,768 | 17.6 | 1624 | 304 | 18.7 | 793 | 144 | 18.2 | 901 | 207 | 23.0 |
| Accounting (2) | | | | | | | 326 | 72 | 22.1 | 148 | 29 | 19.6 | 157 | 53 | 33.8 |
| Banking & Finance (2) | | | | | | | 217 | 24 | 11.1 | 104 | 9 | 8.7 | 126 | 11 | 8.7 |
| Business Admin & Management (2) | | | | | | | 356 | 55 | 15.4 | 179 | 20 | 11.2 | 224 | 46 | 20.5 |
| Business Economics (2) | | | | | | | 55 | 7 | 12.7 | 20 | 2 | 10.0 | 28 | 5 | 17.9 |
| Marketing Management & Research (2) | | | | | | | 198 | 50 | 25.3 | 94 | 24 | 25.5 | 110 | 31 | 28.2 |
| Business Statistics (2) | | | | | | | 15 | 1 | 6.7 | 9 | 1 | 11.1 | 3 | 0 | 0.0 |
| Operations Research (2) | | | | | | | 83 | 16 | 19.3 | 45 | 4 | 8.9 | 46 | 4 | 8.7 |
| Ogranizational Behavior (2) | | | | | | | 123 | 40 | 32.5 | 68 | 29 | 42.6 | 56 | 21 | 37.5 |
| Business & Management, General | | | | | | | 87 | 18 | 20.6 | 50 | 10 | 20.0 | 55 | 12 | 21.8 |
| Business & Management, Other (2) | | | | | | | 164 | 29 | 17.7 | 76 | 16 | 21.1 | 96 | 24 | 25.0 |
| COMMUNICATIONS, SUBTOTAL (2) | 406 | 32 | 7.9 | 187 | 33 | 17.6 | 507 | 208 | 41.0 | 266 | 111 | 41.7 | 258 | 111 | 43.0 |
| Communications Research (2) | | | | | | | 116 | 43 | 37.1 | 55 | 30 | 54.5 | 79 | 33 | 41.8 |
| Journalism (3) | 406 | 32 | 7.9 | 187 | 33 | 17.6 | 38 | 10 | 26.3 | 22 | 8 | 36.4 | 18 | 2 | 11.1 |
| Radio & Television (2) | | | | | | | 47 | 12 | 25.5 | 19 | 7 | 36.8 | 13 | 5 | 38.5 |
| Communications, General (2) | | | | | | | 128 | 61 | 47.7 | 89 | 31 | 34.8 | 75 | 35 | 46.7 |
| Communications, Other (2) | | | | | | | 178 | 82 | 46.1 | 81 | 35 | 43.2 | 73 | 36 | 69.3 |
| OTHER PROFESSIONAL FIELDS, SUBTOTAL | 8,227 | 1,432 | 17.4 | 5,698 | 1,997 | 35.0 | 1514 | 596 | 39.4 | 797 | 340 | 42.7 | 777 | 341 | 43.9 |
| Architecture, Environmental Design(4) | 57 | 4 | 7.0 | | | | 59 | 8 | 13.6 | 36 | 12 | 33.3 | 27 | 4 | 14.8 |
| Home Economics | 690 | 653 | 94.6 | 720 | 623 | 86.5 | 186 | 155 | 83.3 | 90 | 77 | 85.6 | 88 | 73 | 83.0 |
| Law | 1,315 | 56 | 4.3 | 248 | 14 | 5.6 | 43 | 2 | 4.7 | 25 | 1 | 4.0 | 31 | 2 | 6.5 |
| Library & Archival Science | 428 | 140 | 32.7 | 645 | 304 | 47.1 | 119 | 64 | 53.8 | 72 | 39 | 54.2 | 57 | 35 | 61.4 |
| Public Administration (2) | | | | | | | 240 | 60 | 25.0 | 109 | 27 | 24.8 | 85 | 30 | 35.3 |
| Social Work | 886 | 314 | 35.4 | 1,614 | 795 | 49.3 | 415 | 239 | 57.6 | 218 | 139 | 63.8 | 231 | 150 | 64.9 |
| Theology | 4,761 | 260 | 5.5 | 2,080 | 173 | 8.3 | 427 | 59 | 13.8 | 229 | 36 | 15.7 | 228 | 33 | 14.5 |
| Professional Fields, Other (5) | 90 | 5 | 5.6 | 391 | 88 | 22.5 | 25 | 9 | 36.0 | 18 | 9 | 50.0 | 30 | 14 | 46.7 |

(1) Originally "Business & Commerce, Business Administration," changed to "Business Aministration" in 1962, and to "Business Administration and Management" in 1983. (2) Broken out in 1983. (3) Originally "Writing & Journalism." Changed to "Journalism" in 1962.
(4) Dropped in 1962. Added in 1983 as "Architecture and Environmental Design." (5) Added in 1968.

SOURCE: Earned Degrees Conferred Series, National Center for Education Statistics, 1947-48--1984-85; Journal of American Medical Association, Vol. 243, No.9, March 1980; Vol. 246, No. 25, December 25, 1981; Vol. 248, No. 24, December 24/31, 1982, copyright by the American Medical Association; A Review of Legal Education in the United States, Fall 1979 - Fall 1986, American Bar Association; and personal communication from the Association of American Medical Colleges, American Veterinary Medicine Association, American Dental Association, American Podiatry Association and the American Association of Colleges of Pharmacy 1987.

## TABLE 3-2

FIRST PROFESSIONAL DEGREES CONFERRED BY FIELD AND SEX, SELECTED YEARS 1947-48 THRU 1985-86

| YEAR | | MEDICINE | | DENISTRY | | OPTOMETRY | | OSTEOPATHY | | PODIATRY | | VET. MEDICINE | | LAW | | THEOLOGY | | ARCHITECTURE | | PHARMACY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1947-48 | T | 6,714 | | 1,625 | | 1,425 | | | | | | 242 | | 10,990 | | | | 1,074 | | 2,104 | |
| | W | 744 | 11.1 | 37 | 2.3 | 40 | 2.8 | | | | | 13 | 5.4 | 420 | 3.8 | | | 131 | 12.2 | 449 | 21.3 |
| 1949-50 | T | 5,612 | | 2,579 | | 1,801 | | 346 | | | | 803 | | 14,312 | | 3,221 | | 2,563 | | 5,751 | |
| | W | 584 | 10.4 | 18 | 0.7 | 19 | 1.1 | 19 | 5.5 | | | 12 | 1.5 | 421 | 3.0 | 211 | 6.6 | 122 | 4.8 | 441 | 7.7 |
| 1953-54 | T | 6,757 | | 3,102 | | 706 | | 499 | | | | 803 | | 9,298 | | 4,463 | | 1,623 | | 3,885 | |
| | W | 343 | 9.1 | 39 | 0.8 | 20 | 2.8 | 10 | 2.2 | | | 10 | 1.2 | 322 | 3.5 | 119 | 2.7 | 92 | 5.7 | 343 | 8.8 |
| 1957-58 | T | 6,861 | | 3,065 | | 264 | | 466 | | | | 809 | | 9,394 | | 4,989 | | 1,612 | | 3,782 | |
| | W | 351 | 5.1 | 34 | 0.9 | 1 | 0.4 | 6 | 1.3 | | | 13 | 1.6 | 272 | 2.9 | 61 | 1.2 | 76 | 4.7 | 391 | 10.3 |
| 1959-60 | T | 7,074 | | 3,247 | | 339 | | 423 | | | | 825 | | 9,240 | | 5,184 | | 1,801 | | 3,492 | |
| | W | 394 | 5.9 | 26 | 0.8 | 4 | 1.2 | 8 | 1.9 | | | 18 | 2.2 | 230 | 2.5 | 87 | 1.6 | 57 | 3.3 | 416 | 13.5 |
| 1963-64 | T | 7,342 | | 3,196 | | 305 | | 352 | | | | 852 | | 10,679 | | 4,423 | | 2,059 | | 2,207 | |
| | W | 432 | 6.3 | 14 | 0.4 | 5 | 1.7 | 4 | 1.1 | | | 32 | 3.9 | 307 | 2.9 | 65 | 1.5 | 78 | 3.9 | 254 | 11.5 |
| 1965-66 | T | 7,720 | | 3,264 | | 380 | | 360 | | 136 | | 922 | | 13,246 | | 4,124 | | 2,599 | | 3,763 | |
| | W | 516 | 7.2 | 35 | 1.1 | 3 | 0.8 | 5 | 1.4 | 2 | 1.5 | 52 | 6.0 | 470 | 3.5 | 74 | 1.8 | 103 | 4.6 | 536 | 16.6 |
| 1970-71 | T | 8,986 | | 3,777 | | 531 | | 472 | | 241 | | 1,252 | | 17,652 | | 5,055 | | 5,578 | | 4,593 | |
| | W | 829 | 9.2 | 46 | 1.2 | 13 | 2.4 | 11 | 2.3 | 5 | 2.0 | 98 | 7.8 | 1,293 | 7.3 | 118 | 2.3 | 667 | 12.0 | 951 | 25.2 |
| 1972-73 | T | 10,398 | | 5,086 | | 771 | | 523 | | 259 | | 1,299 | | 27,484 | | 5,291 | | 6,980 | | 5,079 | |
| | W | 939 | 9.0 | 58 | 1.4 | 20 | 2.6 | 15 | 2.9 | 1 | 0.4 | 133 | 10.2 | 2,224 | 8.1 | 182 | 3.4 | 923 | 13.2 | 1,277 | 25.1 |
| 1974-75 | T | 12,550 | | 4,809 | | 792 | | 665 | | 353 | | 1,415 | | 29,497 | | 5,098 | | 8,238 | | 6,487 | |
| | W | 1,654 | 13.2 | 149 | 3.1 | 40 | 5.1 | 35 | 5.3 | 4 | 1.1 | 225 | 15.9 | 4,455 | 15.1 | 348 | 6.8 | 1,435 | 17.4 | 1,821 | 28.1 |
| 1976-77 | T | 13,599 | | 5,138 | | 953 | | 852 | | 486 | | 1,586 | | 34,104 | | 5,861 | | 9,222 | | 7,495 | |
| | W | 2,611 | 19.2 | 374 | 7.3 | 105 | 11.0 | 75 | 8.8 | 16 | 3.3 | 362 | 22.8 | 7,657 | 22.5 | 554 | 9.5 | 1,973 | 21.4 | 2,434 | 32.5 |
| 1978-79 | T | 14,925 | | 5,488 | | 1,046 | | 1,065 | | 572 | | 1,714 | | 35,387 | | 6,607 | | 9,297 | | 6,919 | |
| | W | 3,452 | 23.1 | 652 | 11.9 | 136 | 13.0 | 167 | 15.7 | 41 | 7.2 | 496 | 28.9 | 10,084 | 28.5 | 866 | 13.1 | 2,401 | 25.8 | 2,759 | 39.9 |
| 1979-80 | T | 15,046 | | 5,321 | | 1,085 | | 1,011 | | 580 | | 1,852 | | 35,855 | | 7,012 | | 9,176 | | 7,122 | |
| | W | 3,523 | 23.4 | 719 | 13.5 | 170 | 15.7 | 159 | 15.7 | 73 | 12.6 | 615 | 33.2 | 10,828 | 30.2 | 1,009 | 14.4 | 2,548 | 27.8 | 2,919 | 41.0 |
| 1980-81 | T | 15,505 | | 5,460 | | 1,097 | | 1,145 | | 597 | | 1,922 | | 36,331 | | 6,898 | | 9,455 | | 6,640 | |
| | W | 3,833 | 24.7 | 788 | 14.4 | 207 | 18.9 | 188 | 16.4 | 69 | 11.6 | 677 | 35.2 | 11,768 | 32.1 | 962 | 13.9 | 2,645 | 28.1 | 2,910 | 43.8 |
| 1981-82 | T | 15,985 | | 5,550 | | 1,113 | | 1,017 | | 599 | | 1,886 | | 35,543 | | 6,091 | | 9,728 | | 6,448 | |
| | W | 3,991 | 25.0 | 825 | 14.9 | 224 | 20.0 | 186 | 18.3 | 63 | 10.5 | 668 | 35.4 | 11,607 | 32.7 | 1,084 | 15.7 | 2,903 | 29.9 | 3,031 | 47.0 |
| 1982-83 | T | 15,728 | | 5,371 | | 1,120 | | 1,317 | | 631 | | 2,012 | | 36,540 | | 6,494 | | 9,823 | | 5,919 | |
| | W | 4,193 | 26.7 | 838 | 15.6 | 246 | 22.0 | 261 | 19.8 | 79 | 12.5 | 822 | 40.9 | 13,218 | 36.2 | 1,095 | 16.9 | 3,420 | 34.8 | 2,925 | 49.4 |
| 1983-84 | T | 16,343 | | 5,274 | | 1,171 | | 1,287 | | 607 | | 2,138 | | 37,012 | | 6,878 | | 9,186 | | 5,393 | |
| | W | 4,632 | 28.3 | 1,089 | 20.6 | 285 | 24.3 | 262 | 20.4 | 77 | 12.7 | 887 | 41.5 | 13,630 | 36.8 | 1,205 | 17.5 | 3,291 | 35.9 | 2,657 | 49.3 |
| 1984-85 | T | 16,318 | | 5,337 | | 1,117 | | 1,489 | | 582 | | 2,178 | | 37,451 | | 7,221 | | 9,325 | | 5,011 | |
| | W | 4,904 | 30.1 | 1,063 | 19.9 | 306 | 27.4 | 353 | 23.7 | 118 | 20.3 | 1,043 | 47.9 | 14,421 | 38.5 | 1,335 | 18.5 | 3,306 | 35.5 | 2,668 | 53.2 |
| 1985-86 | T | 16,117 | | 4,958 | | | | | | | | 2,104 | | | | | | | | 6,010 | |
| | W | 4,957 | 30.8 | 1,094 | 22.1 | | | | | | | 1,021 | 48.5 | | | | | | | 3,265 | 54.3 |

SOURCE: Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity, and Sex, Academic Year 1980-1981 and 1984-85, U.S. Department of Education, Office for Civil Rights, Unpublished, and Data on Earned Degrees Conferred by Sex, Academic Year 1982-83, National Center for Education Statistics, unpublished.

## TABLE 3-3

### FIRST PROFESSIONAL DEGREES BY FIELD, RACIAL GROUP AND SEX

| FIELD | TOTAL* | | | BLACK NON-HISPANIC* | | | HISPANIC* | | | ASIAN/PACIFIC ISLANDER* | | | AM. INDIAN/ ALASKAN NATIVE* | | | WHITE NON-HISPANIC* | | | NONRESIDENT ALIEN* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % B | Total | Women | % H | Total | Women | % A/P | Total | Women | % A.I. | Total | Women | % Wh | Total | Women | % Al |
| All Fields 1984-85 | 75,562 | 24,782 | 32.8 | 2,837 | 1,348 | 3.9 | 1,882 | 644 | 2.5 | 1,754 | 646 | 2.3 | 244 | 71 | 0.3 | 61,566 | 20,051 | 81.5 | 759 | 186 | 1.0 |
| All Fields 1982-83 | 73,136 | 21,826 | 29.8 | 2,931 | 1,159 | 4.1 | 1,541 | 410 | 2.2 | 1,456 | 465 | 2.0 | 192 | 58 | 0.3 | 64,551 | 16,922 | 90.5 | 669 | 132 | 19.7 |
| Dentistry | 5,585 | 954 | 17.1 | 195 | 69 | 3.6 | 86 | 17 | 1.6 | 204 | 45 | 3.7 | 10 | 1 | 0.2 | 4,896 | 788 | 89.7 | 69 | 17 | 1.3 |
| Medicine | 15,484 | 4,134 | 26.7 | 769 | 324 | 5.0 | 395 | 90 | 2.5 | 446 | 117 | 2.9 | 51 | 12 | 0.3 | 13,723 | 3,263 | 88.5 | 121 | 27 | 0.8 |
| Optometry | 1,116 | 247 | 22.1 | 9 | 6 | 0.8 | 16 | 3 | 1.5 | 40 | 19 | 3.6 | 2 | 1 | 0.2 | 1,017 | 174 | 92.7 | 13 | 4 | 1.2 |
| Osteopathic Med. | 1,319 | 256 | 19.4 | 16 | 5 | 1.4 | 13 | 2 | 1.1 | 14 | 6 | 1.2 | 8 | 1 | 0.7 | 1,091 | 173 | 95.3 | 3 | 1 | 0.3 |
| Pharmacy | 705 | 329 | 46.7 | 20 | 12 | 3.0 | 19 | 8 | 2.9 | 115 | 52 | 17.3 | 3 | 1 | 0.5 | 471 | 195 | 70.9 | 36 | 15 | 5.6 |
| Podiatry | 631 | 79 | 12.5 | 20 | 7 | 3.4 | 12 | 2 | 2.0 | 8 | 2 | 1.3 | 1 | 1 | 0.2 | 552 | 57 | 92.5 | 4 | 0 | 0.7 |
| Veterinary Med. | 2,060 | 844 | 41.0 | 37 | 21 | 1.9 | 11 | 4 | 0.6 | 17 | 6 | 0.9 | 4 | 2 | 0.2 | 1,846 | 642 | 96.0 | 7 | 2 | 0.4 |
| Chiropractic Med. | 2,889 | 581 | 20.1 | 13 | 2 | 0.6 | 24 | 3 | 1.0 | 22 | 1 | 0.9 | 3 | 2 | 0.1 | 2,144 | 357 | 91.7 | 131 | 24 | 5.6 |
| Law* | 36,988 | 13,354 | 36.1 | 1,377 | 692 | 3.7 | 834 | 271 | 2.3 | 490 | 196 | 1.3 | 96 | 34 | 0.3 | 28,450 | 9,930 | 76.9 | 685 | 230 | 1.9 |
| Theology* | 6,494 | 1,099 | 16.9 | 289 | 53 | 4.5 | 84 | 14 | 1.3 | 49 | 9 | 0.8 | 13 | 4 | 0.2 | 4,683 | 882 | 72.1 | 210 | 11 | 3.2 |

*"All Fields" data are for the year specified. Individual field data by sex and minority data for Law and Theology are for 1982-83. *All Minority Data for other individual fields are for 1980-81, and percentages were calculated on 1980-81 totals.

## TABLE 3-4

PERCENTAGE OF FIRST PROFESSIONAL DEGREES AWARDED TO WOMEN BY FIELD, 1972-73 - 1984-85

| YEAR | Dentistry | Medicine | Optometry | Osteopathic Med | Pharmacy | Podiatry Podiatric Med | Veterinary | Chiropractic | Law, General | Theological Prof. | Other | ALL FIELDS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971-72 | 1.2 | 9.0 | 2.2 | 3.5 | | 0.3 | 9.4 | | 7.2 | 1.9 | 20.8 | 6.3 |
| 1972-73 | 1.6 | 9.0 | 2.6 | 2.9 | 29.1 | 0.3 | 10.2 | | 8.1 | 3.4 | 11.8 | 7.1 |
| 1973-74 | 2.0 | 11.2 | 4.2 | 2.8 | | 1.1 | 11.2 | | 11.5 | 5.5 | 26.1 | 9.9 |
| 1974-75 | 3.1 | 13.2 | 5.0 | 5.3 | 28.1 | 1.1 | 15.9 | | 15.1 | 6.8 | 11.0 | 12.5 |
| 1975-76 | 4.5 | 16.2 | 7.7 | 7.2 | 29.6 | 2.6 | 18.1 | 9.3 | 19.2 | 7.6 | 10.0 | 15.6 |
| 1976-77 | 7.4 | 19.2 | 11.0 | 8.8 | 27.5 | 3.3 | 22.8 | 8.5 | 22.5 | 9.5 | 47.8 | 18.7 |
| 1977-78 | 11.2 | 21.5 | 13.1 | 12.5 | 30.2 | 4.8 | 24.5 | 10.0 | 26.0 | 11.3 | | 21.5 |
| 1978-79 | 11.8 | 23.1 | 13.0 | 15.7 | 36.0 | 7.2 | 28.9 | 10.6 | 28.5 | 13.1 | 13.1 | 23.6 |
| 1979-80 | 13.5 | 23.4 | 15.7 | 15.7 | 37.5 | 12.6 | 32.8 | 12.1 | 30.2 | 14.4 | | 24.9 |
| 1980-81 | 14.4 | 24.7 | 18.9 | 16.4 | 43.8 | 11.6 | 35.2 | 16.6 | 32.1 | 13.9 | | 26.6 |
| 1981-82 | 15.4 | 25.0 | 19.9 | 17.9 | 44.7 | 10.5 | 36.2 | 17.9 | 33.6 | 15.7 | | 27.5 |
| 1982-83 | 17.1 | 26.7 | 22.1 | 19.4 | 46.7 | 12.5 | 41.0 | 20.1 | 36.2 | 16.9 | | 29.9 |
| 1983-84 | 19.6 | 28.2 | 24.1 | 21.8 | 53.2 | 12.7 | 40.5 | 22.7 | 36.8 | 17.5 | 38.3 | 31.0 |
| 1984-85 | 20.7 | 30.4 | 27.2 | 23.7 | 50.1 | 20.2 | 47.9 | 22.1 | 38.5 | 18.5 | 41.2 | 32.8 |

SOURCE: Digest of Education Statistics, NCES; Review of Legal Education in the United States, 1978, and Fall--1980-86, American Bar Association; Journal of the American Medical Association, Vol. 238, No. 26, December 26, 1977; Vol. 246 No. 25, December 25, 1981; Vol. 248, No. 24, December 24-31, 1982; and Vol.250, No. 12, September 23, 1983; Annual Report, Dental Education Series, 1975-78, 1980-86, American Dental Association; Fall Enrollments Questionnaire 1974-77 and Annual Statistical Report, 1981, American Association of Colleges of Osteopathic Medicine; and Personal Communications from the Association of American Veterinary Medical Colleges; the American Association of Dental Schools, American Association of Colleges of Podriatic Medicine, Association of American Medical Colleges and the American Association of Colleges of Osteopathic Medicine; Minorities and Women in the Health Fields, Health Resources Administration, 1987

## TABLE 3-5

ENROLLMENT FOR FIRST PROFESSIONAL DEGREES BY FIELD AND SEX, SELECTED YEARS, FALL 1960 - 1986

| YEAR | | MEDICINE | | DENTISTRY | | OPTOMETRY | | OSTEOPATHY | | PODIATRY | | VET. MEDICINE | | LAW | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1960-61 | T | 30,288 | | 13,580 | | 1,101 | | | | | | 3,832 | | 43,695 | |
| | W | 1,745 | 5.8 | 88 | 0.6 | 40 | 3.6 | | | | | 137 | 3.6 | 1,651 | 3.8 |
| 1966-67 | T | 28,685 | | 11,826 | | 1,671 | | 1,431 | | 678 | | 2,245 | | 46,878 | |
| | W | 2,099 | 7.3 | 180 | 1.5 | 37 | 2.2 | 32 | 2.2 | 9 | 1.3 | 183 | 8.1 | 2,032 | 4.3 |
| 1968-69 | T | 35,733 | | 15,542 | | 2,241 | | 1,878 | | 1,108 | | 4,488 | | 64,220 | |
| | W | 3,129 | 8.8 | 171 | 1.1 | 53 | 2.4 | 54 | 2.9 | 8 | 0.7 | 351 | 7.8 | 3,745 | 5.8 |
| 1971-72 | T | 43,965 | | 17,433 | | 2,691 | | 2,301 | | 1,267 | | 5,163 | | 94,416 | |
| | W | 4,730 | 10.8 | 355 | 2.0 | 86 | 3.2 | 79 | 3.4 | 15 | 1.2 | 593 | 11.5 | 9,075 | 9.6 |
| 1973-74 | T | 49,511 | | 19,215 | | 3,360 | | 2,799 | | 1,633 | | 5,528 | | 103,641 | |
| | W | 7,701 | 15.6 | 892 | 4.6 | 227 | 6.8 | 180 | 6.5 | 40 | 2.4 | 957 | 17.3 | 16,730 | 16.1 |
| 1975-76 | T | 55,622 | | 20,517 | | 3,811 | | 3,438 | | 2,105 | | 5,694 | | 113,205 | |
| | W | 11,386 | 20.5 | 1,987 | 9.7 | 415 | 10.9 | 364 | 10.6 | 108 | 5.1 | 1,337 | 23.5 | 26,403 | 23.3 |
| 1976-77 | T | 58,266 | | 21,013 | | 4,033 | | 3,671 | | 2,204 | | 6,571 | | 117,451 | |
| | W | 13,059 | 22.4 | 2,349 | 11.1 | 542 | 13.4 | 472 | 12.9 | 157 | 7.1 | 1,805 | 27.5 | 29,538 | 29.2 |
| 1977-78 | T | 60,039 | | 21,510 | | 4,440 | | 3,926 | | 2,388 | | 6,903 | | 118,557 | |
| | W | 14,218 | 23.7 | 2,796 | 13.0 | 699 | 15.7 | 570 | 14.8 | 259 | 10.8 | 2,129 | 30.8 | 32,538 | 27.5 |
| 1978-79 | T | 62,213 | | 22,179 | | 4,436 | | 4,254 | | 2,498 | | 7,312 | | 119,120 | |
| | W | 15,102 | 24.3 | 3,112 | 14.0 | 757 | 17.1 | 688 | 16.2 | 268 | 10.7 | 2,471 | 33.8 | 36,251 | 30.4 |
| 1979-80 | T | 63,800 | | 22,482 | | 4,500 | | 4,479 | | 2,531 | | 7,007 | | 122,801 | |
| | W | 16,141 | 25.3 | 3,482 | 15.5 | 868 | 19.3 | 775 | 17.3 | 305 | 12.1 | 2,570 | 36.7 | 38,627 | 31.5 |
| 1980-81 | T | 65,497 | | 22,842 | | 4,540 | | 4,940 | | 2,577 | | 8,154 | | 125,597 | |
| | W | 17,204 | 26.3 | 3,879 | 17.0 | 985 | 21.7 | 971 | 19.7 | 306 | 11.9 | 3,220 | 29.4 | 42,122 | 33.6 |
| 1981-82 | T | 66,485 | | 22,621 | | 4,541 | | 5,304 | | 2,584 | | 8,499 | | 127,312 | |
| | W | 18,555 | 25.0 | 4,227 | 18.7 | 1,077 | 23.7 | 1,108 | 20.9 | 361 | 14.0 | 3,576 | 42.0 | 44,902 | 35.3 |
| 1982-83 | T | 66,886 | | 22,235 | | 4,561 | | 5,822 | | 2,608 | | 8,682 | | 127,828 | |
| | W | 19,627 | 29.3 | 4,457 | 20.0 | 1,173 | 25.7 | 1,317 | 22.6 | 428 | 16.4 | 4,028 | 46.4 | 47,083 | 36.8 |
| 1983-84 | T | 67,327 | | 21,428 | | 4,539 | | 6,212 | | 2,556 | | 8,816 | | 127,195 | |
| | W | 20,635 | 30.6 | 4,733 | 22.1 | 1,291 | 28.4 | 1,526 | 24.6 | 476 | 18.6 | 4,152 | 47.1 | 47,980 | 37.7 |
| 1984-85 | T | 67,016 | | 20,588 | | 4,460 | | 6,547 | | 2,616 | | 8,917 | | 125,698 | |
| | W | 21,316 | 31.8 | 4,899 | 23.8 | 1,391 | 31.2 | 1,707 | 26.1 | 569 | 21.7 | 4,376 | 49.1 | 48,499 | 38.6 |
| 1985-86 | T | 66,585 | | 19,563 | | 4,209 | | 6,671 | | 2,749 | | 8,938 | | 124,092 | |
| | W | 21,650 | 32.5 | 4,944 | 25.3 | 1,451 | 34.5 | 1,768 | 26.5 | 620 | 22.6 | 4,536 | 50.8 | 49,050 | 39.5 |
| 1986-87 | T | 66,125 | | 18,673 | | | | | | 2,852 | | 8,887 | | 123,277 | |
| | W | 22,100 | 33.4 | 5,068 | 27.1 | | | | | 672 | 23.7 | 4,714 | 53.0 | 49,522 | 40.2 |

FIELD: Architecture and Environmental Design

SOURCE: Earned Degrees Conferred Series, 1970-71 thru 1985-86, Department of Education Center for Statistics

TABLE 3-6

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1970-71 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1970-71 | 5,578 | 667 | 12.0 | 1,724 | 243 | 14.1 | 36 | 3 | 8.3 |
| 1971-72 | 6,452 | 775 | 12.0 | 1,928 | 281 | 14.6 | 50 | 7 | 14.0 |
| 1972-73 | 6,980 | 923 | 13.2 | 2,319 | 364 | 15.7 | 58 | 4 | 6.9 |
| 1973-74 | 7,840 | 1,164 | 14.8 | 2,733 | 502 | 18.4 | 69 | 4 | 5.8 |
| 1974-75 | 8,238 | 1,435 | 17.4 | 2,953 | 599 | 20.3 | 69 | 11 | 15.9 |
| 1975-76 | 9,169 | 1,757 | 19.2 | 3,215 | 670 | 20.8 | 82 | 13 | 15.8 |
| 1976-77 | 9,222 | 1,973 | 21.4 | 3,213 | 724 | 22.5 | 73 | 11 | 15.1 |
| 1977-78 | 9,266 | 2,199 | 23.7 | 3,121 | 812 | 26.0 | 73 | 16 | 21.9 |
| 1978-79 | 9,297 | 2,401 | 25.8 | 3,124 | 889 | 28.5 | 96 | 22 | 22.9 |
| 1979-80 | 9,176 | 2,548 | 27.8 | 3,157 | 900 | 28.5 | 79 | 13 | 16.5 |
| 1980-81 | 9,455 | 2,655 | 28.1 | 3,153 | 919 | 29.1 | 93 | 20 | 21.5 |
| 1981-82 | 9,728 | 2,903 | 29.8 | 3,327 | 1,085 | 32.6 | 80 | 22 | 27.5 |
| 1982-83 | 9,823 | 3,420 | 34.8 | 3,357 | 1,133 | 33.8 | 97 | 23 | 23.7 |
| 1983-84 | 9,186 | 3,291 | 35.8 | 3,223 | 1,026 | 31.8 | 84 | 22 | 26.2 |
| 1984-85 | 9,325 | 3,306 | 35.5 | 3,275 | 1,127 | 34.4 | 89 | 23 | 25.8 |
| 1985-86 | 9,119 | 3,295 | 36.1 | 3,260 | 1,131 | 35.0 | 73 | 17 | 23.3 |
| TOTAL | 136,854 | 34,712 | 25.4 | 47,082 | 12,405 | 26.3 | 1,201 | 231 | 19.2 |

FIELD: Architecture

SOURCE: American Institute of Architects, Personal Communication

## TABLE 3-7

**TOTAL FULL TIME ENROLLMENTS IN ARCHITECTURE BY TYPE OF PROGRAM, SEX, MINORITY STATUS AND CITIZENSHIP, 1975, 1985 AND 1987**

| YEAR AND TYPE OF DEGREE PROGRAM | TOTAL | WOMEN | % WOMEN | MINORITY | % MINORITY | FOREIGN | % FOREIGN |
|---|---|---|---|---|---|---|---|
| **Non-Accredited Degree*** | | | | | | | |
| 1975 | 14,520 | 1,923 | 13.2 | 1,266 | 8.7 | 580 | 4.0 |
| 1985 | 11,584 | 3,358 | 29.0 | 1,850 | 16.0 | 1,041 | 9.0 |
| 1987 | 10,621 | 3,067 | 28.9 | 1,715 | 16.1 | 755 | 7.1 |
| **Baccalaureate in Architecture (5-Year Program)** | | | | | | | |
| 1975 | 15,289 | 1,938 | 12.7 | 1,338 | 8.7 | 3,653 | 23.9 |
| 1985 | 16,479 | 4,114 | 25.0 | 2,939 | 17.8 | 1,972 | 12.0 |
| 1987 | 17,175 | 4,654 | 27.1 | 3,030 | 17.6 | 1,803 | 10.5 |
| **Master's in Architecture** | | | | | | | |
| 1975 | 2,754 | 403 | 14.6 | 306 | 11.1 | 222 | 8.1 |
| 1985 | 4,246 | 1,440 | 33.9 | 563 | 13.3 | 695 | 16.4 |
| 1987 | 4,377 | 1,501 | 34.3 | 464 | 10.6 | 764 | 17.5 |

* Baccalaureate in Architecture

SOURCE: Personal Communication with American Institute of Architects, November 1987

## TABLE 3-8

**AIA MEMBERSHIP BY RACE AND SEX, 1987**

| | | |
|---|---|---|
| Estimated registered architects in U.S. | | 71,300 |
| Members of AIA | | 52,379 |
| Women* | | 3,788 |
| Minorities* | | 3,139 |
| Indian/Eskimo/Aleut | 61 | |
| Asian/Pacific Islander | 1,534 | |
| Hispanic | 880 | |
| Black | 484 | |
| Other | 180 | |
| AIA member owned architecture firms (1985) | | 14,417 |
| Headed by women | 348 | |
| Headed by minorities | 653 | |

*Includes only those who indicated sex and/or ethnicity.

FIELD: Accounting

SOURCE: Minority Recruitment and Equal Opportunity Committee Report, 1981-1986, by Sharon L. Donahue, American Institute of Certified Public Acccountants

## TABLE 3-9

NUMBER AND PERCENT OF PROFESSIONALS EMPLOYED IN MAJOR ACCOUNTING FIRMS BY MINORITY GROUP AND SEX, SELECTED YEARS, 1976-86

| | Am. Indian | | Asians | | Blacks | | Hispanics | | Total Min | | Total Women | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | No. | %AI | No. | %A | No. | %B | No. | %H | No. | %M | No. | %W | Prof |
| 1976 | 26 | 1.2 | 641 | 29.6 | 955 | 44.2 | 541 | 25.0 | 2163 | 3.8 | 5783 | 10.3 | 56336 |
| 1978 | 34 | 1.3 | 831 | 32.9 | 1042 | 41.2 | 620 | 24.5 | 2527 | 4.3 | 8514 | 14.3 | 59352 |
| 1980 | 49 | 1.6 | 1061 | 35.7 | 1204 | 40.5 | 662 | 22.2 | 2976 | 4.4 | 13294 | 19.8 | 67005 |
| 1981 | 51 | 1.5 | 1349 | 39.9 | 1193 | 35.3 | 788 | 23.3 | 3381 | 4.6 | 15984 | 21.9 | 73046 |
| 1982 | 51 | 1.4 | 1454 | 40.4 | 1185 | 33.0 | 905 | 25.2 | 3595 | 4.7 | 18509 | 24.1 | 76670 |
| 1983 | 50 | 1.4 | 1346 | 37.8 | 1132 | 31.8 | 1037 | 29.1 | 3565 | 4.5 | 20850 | 26.1 | 79896 |
| 1984 | 42 | 1.1 | 1567 | 41.2 | 1125 | 29.6 | 1073 | 28.2 | 3807 | 4.6 | 22818 | 27.3 | 83610 |
| 1986 | 44 | 0.9 | 2219 | 46.0 | 1247 | 25.9 | 1311 | 27.2 | 4821 | 5.2 | 27611 | 30.0 | 92150 |
| TOTALS | 347 | 1.3 | 10468 | 39.0 | 11387 | 42.4 | 7422 | 27.7 | 26835 | 4.6 | 133363 | 22.7 | 588065 |

## TABLE 3-10

PLACEMENT OF ACCOUNTING GRADUATES FROM HISTORICALLY BLACK AND MINORITY COLLEGES AND UNIVERSITIES, SELECTED YEARS, 1973-1986

| | Total Majors | Total Graduates | Public Accounting | | Industry | | Government | | Nonprofit Org | | Graduate Schools | | Other | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1973 | 4003 | 837 | 126 | [illegible] | 244 | [illegible] | [illegible] | [illegible] | 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 38 | 4.5 |
| 1975 | 5936 | 1034 | 170 | 16.4 | 306 | 29.6 | 156 | 15.3 | [illegible] | [illegible] | 94 | [illegible] | 34 | [illegible] | 34 | [illegible] |
| 1977 | 7303 | [illegible] | [illegible] | [illegible] | 346 | 37.3 | [illegible] | 15.4 | 32 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1979 | 11914 | [illegible] | [illegible] | [illegible] | 543 | 30.6 | 297 | 16.7 | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] | [illegible] |
| 1980 | 10851 | 1761 | 180 | 10.2 | 544 | 30.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 58 | 3.3 | [illegible] | [illegible] |
| 1981 | 10380 | 1555 | 226 | [illegible] | 488 | [illegible] | [illegible] | [illegible] | 38 | [illegible] | [illegible] | [illegible] | 66 | [illegible] | 66 | [illegible] |
| 1982 | 10138 | 1506 | 154 | 10.2 | [illegible] | 28.[illegible] | [illegible] | [illegible] | [illegible] | 3.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1983 | 8757 | 1257 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 17.4 | [illegible] | 3.7 | [illegible] | [illegible] | [illegible] | [illegible] | 37 | [illegible] |
| 1984 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 156 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 45 | [illegible] | [illegible] | [illegible] |
| 1985 | | 1409 | 163 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| TOTALS | 69282 | 13853 | 1697 | 12.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 448 | [illegible] |

## TABLE 3-11

MINORITY AND WOMEN CPA'S EMPLOYED IN MAJOR ACCOUNTING FIRMS, 1976-1986

| YEAR | Amer Indian | Asian | Blacks | Hispanic | Total Min | Total Women |
|---|---|---|---|---|---|---|
| 1976 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1977 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1978 | 15 | [illegible] | 159 | [illegible] | [illegible] | 1944 |
| 1979 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1980 | [illegible] | [illegible] | 194 | [illegible] | [illegible] | [illegible] |
| 1981 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1982 | [illegible] | 475 | [illegible] | 305 | [illegible] | [illegible] |
| 1983 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1984 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1985 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1986 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

SOURCE: Earned Degrees Conferred by U. S. Colleges and Universities 1971-72 through 1984-85, Center for Education Statistics

TABLE 3-12

**DEGREES IN ACCOUNTING BY LEVEL AND SEX, 1971-72 - 1984-85**

| YEAR | BACHELOR'S Both Sexes | BACHELOR'S Women Only | BACHELOR'S % Women | MASTER'S Both Sexes | MASTER'S Women Only | MASTER'S % Women | DOCTOR'S Both Sexes | DOCTOR'S Women Only | DOCTOR'S % Women |
|---|---|---|---|---|---|---|---|---|---|
| 1971-72 | 24,801 | 2,494 | 10.1 | 1,377 | 108 | 7.8 | 51 | 0 | 0.0 |
| 1972-73 | 28,289 | 3,325 | 11.8 | 1,627 | 141 | 8.7 | 83 | 1 | 1.2 |
| 1973-74 | 29,770 | 4,176 | 14.0 | 1,806 | 189 | 10.5 | 70 | 4 | 5.7 |
| 1974-75 | 31,605 | 5,665 | 17.9 | 2,232 | 280 | 12.5 | 60 | 4 | 6.7 |
| 1975-76 | 35,806 | 7,645 | 21.4 | 2,730 | 478 | 17.5 | 55 | 5 | 9.1 |
| 1976-77 | 39,183 | 9,942 | 25.4 | 3,278 | 636 | 19.4 | 53 | 4 | 7.5 |
| 1977-78 | 40,856 | 12,047 | 29.5 | 3,389 | 729 | 21.5 | 44 | 3 | 6.8 |
| 1978-79 | 42,131 | 13,754 | 32.6 | 3,595 | 833 | 23.2 | 52 | 7 | 13.5 |
| 1979-80 | 43,556 | 15,760 | 36.2 | 3,496 | 965 | 27.6 | 51 | 9 | 17.6 |
| 1980-81 | 43,344 | 17,046 | 39.3 | 3,449 | 1,034 | 30.0 | 56 | 8 | 14.3 |
| 1981-82 | 45,542 | 19,329 | 42.4 | 3,246 | 1,086 | 33.5 | 61 | 8 | 13.1 |
| 1982-83 | 45,732 | 20,771 | 45.4 | 3,046 | 1,049 | 34.4 | 66 | 13 | 19.7 |
| 1983-84 | 47,692 | 22,416 | 47.0 | 3,297 | 1,207 | 36.6 | 53 | 17 | 32.1 |
| 1984-85 | 47,005 | 23,050 | 49.0 | 3,207 | 1,259 | 39.3 | 59 | 13 | 22.0 |

Source: Minority Recruitment and Equal Opportunity Committee 1984 and 1986 Report, American Institute of Certified Public Accountants.

TABLE 3-13

MINORITIES WHO ARE PARTNERS IN MAJOR ACCOUNTING FIRMS AND MINORITY ACCOUNTING FIRMS, 1984 AND 1986

| MINORITY | 1984 MAJOR FIRMS | 1984 MINORITY FIRMS | 1986 MAJOR FIRMS | 1986 MINORITY FIRMS |
|---|---|---|---|---|
| American Indian | 6 | 2 | 7 | 2 |
| Asian | 56 | 45 | 80 | 47 |
| Black | 23 | 78 | 26 | 82 |
| Hispanics | 62 | 74 | 88 | 47 |
| Total Minority | 147 | 199 | 201 | 178 |
| Women | 146 | 13 | 230 | 14 |
| Total Professionals (incl. Partners) | 83,610 | 1,068 | 92,150 | 930 |

FIELD: Business Management

SOURCE: Earned Degrees Conferred Series, 1947-48 thru 1985-86, Department of Education Center for Statistics

TABLE 3-14

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1970-71 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1970-71 | 116,709 | 10,803 | 9.3 | 26,654 | 1,045 | 3.9 | 810 | 23 | 2.8 |
| 1971-72 | 123,306 | 11,966 | 9.7 | 30,511 | 1,207 | 4.0 | 902 | 20 | 2.2 |
| 1972-73 | 128,244 | 13,840 | 10.8 | 31,239 | 1,533 | 4.9 | 932 | 53 | 5.7 |
| 1973-74 | 133,905 | 17,481 | 13.1 | 32,820 | 2,161 | 6.6 | 983 | 50 | 5.1 |
| 1974-75 | 135,455 | 22,223 | 16.4 | 36,450 | 3,080 | 8.4 | 1,011 | 41 | 4.0 |
| 1975-76 | 145,035 | 28,783 | 19.8 | 42,728 | 4,974 | 11.6 | 956 | 52 | 5.4 |
| 1976-77 | 152,088 | 35,583 | 23.4 | 46,545 | 6,664 | 14.3 | 869 | 55 | 6.3 |
| 1977-78 | 163,274 | 44,604 | 27.3 | 48,661 | 8,216 | 16.9 | 867 | 72 | 8.3 |
| 1978-79 | 175,420 | 53,875 | 30.7 | 50,646 | 9,698 | 19.1 | 863 | 101 | 11.7 |
| 1979-80 | 189,224 | 63,883 | 33.8 | 55,322 | 12,355 | 22.3 | 796 | 115 | 14.4 |
| 1980-81 | 200,876 | 73,806 | 36.7 | 58,018 | 14,513 | 25.0 | 845 | 125 | 14.8 |
| 1981-82 | 215,817 | 84,718 | 39.3 | 61,428 | 17,069 | 27.8 | 857 | 152 | 17.7 |
| 1982-83 | 220,078 | 90,606 | 41.2 | 65,245 | 18,838 | 28.9 | 809 | 136 | 16.8 |
| 1983-84 | 222,753 | 95,325 | 42.8 | 66,594 | 20,062 | 30.1 | 976 | 201 | 20.6 |
| 1984-85 | 225,513 | 100,110 | 44.4 | 67,461 | 20,869 | 30.9 | 864 | 146 | 16.9 |
| 1985-86 | 230,784 | 103,947 | 45.0 | 66,967 | 20,795 | 31.1 | 965 | 206 | 21.3 |
| TOTAL | 2,778,481 | 760,947 | 27.4 | 787,289 | 163,079 | 20.7 | 14,305 | 1,548 | 10.8 |

FIELD: Business and Management

SOURCE: STAT Sheet, 1984, American Assembly of Collegiate Schools of Business, and Personal Communication, 1987

## TABLE 3-15

**BUSINESS FACULTY MEMBERS AT AACSB MEMBER SCHOOLS BY SEX AND ETHNICITY, 1983-84 - 1985-86**

(Percent)

| | 1984 | 1985 | 1986 |
|---|---|---|---|
| Male | 85.4 | | |
| Female | 14.6 | | |
| White | 88.7 | 87.8 | 87.3 |
| Black | 2.2 | 2.6 | 2.1 |
| Hispanic | 0.6 | 0.7 | 0.8 |
| Asian | 3.6 | 4.5 | 5.0 |
| American Indian | 0.2 | 0.1 | 0.1 |
| Foreign | 4.7 | 4.0 | 4.5 |
| Female (New Hires) | 23.3 | | |

FIELD: Law

SOURCE: A Review of Legal Education in the United States--Fall 1978 thru 1983-84; American Bar Association Section of Legal Education and Admission to the Bar, copyright© by the American Bar Association

## TABLE 3-16

**NUMBER OF TEACHERS IN ABA APPROVED LAW SCHOOLS BY SEX, 1977-78, 1980-81 AND 1983-84 AND MINORITIES 1986-87**

| | 1977 - 1978 | | | 1980 - 1981 | | | 1983 - 1984 | | | 1986-1987 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % W | TOTAL | Women | % W | TOTAL | WOMEN | % W | TOTAL | WOMEN | % W | MINORITIES | % M |
| Full-Time | 3,875 | 411 | 10.61 | 4,225 | 517 | 12.24 | 4,451 | 712 | 16.00 | 4,915 | 1,004 | 20.43 | 312 | 6.35 |
| Part-Time | 2,156 | 230 | 10.67 | 2,255 | 205 | 9.09 | 2,530 | 337 | 13.32 | 2,940 | 539 | 18.33 | 149 | 5.07 |
| Teaching Deans & Administrators | 344 | 32 | 9.30 | 465 | 96 | 20.65 | 503 | 121 | 24.06 | 907 | 358 | 39.47 | 86 | 9.48 |
| **TOTAL** | **6,375** | **673** | **10.56** | **6,945** | **818** | **11.78** | **7,484** | **1,170** | **15.63** | **8,762** | **1,901** | **21.70** | **547** | **6.24** |

FIELD: Law

SOURCE: Earned Degrees Conferred Series, 1970-71 thru 1985-86 Department of Education Center for Statistics

TABLE 3-17

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1970-71 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1970-71 | 545 | 27 | 5.2 | 955 | 46 | 4.8 | 20 | 0 | 0.0 |
| 1971-72 | 503 | 33 | 6.6 | 932 | 54 | 5.8 | 40 | 1 | 2.5 |
| 1972-73 | 474 | 40 | 8.4 | 1,071 | 80 | 7.5 | 37 | 1 | 2.7 |
| 1973-74 | 494 | 52 | 10.5 | 1,181 | 84 | 7.1 | 27 | 1 | 3.7 |
| 1974-75 | 436 | 62 | 14.2 | 1,245 | 100 | 8.0 | 21 | 0 | 0.0 |
| 1975-76 | 531 | 100 | 18.8 | 1,442 | 173 | 11.9 | 76 | 3 | 3.9 |
| 1976-77 | 559 | 154 | 27.5 | 1,574 | 208 | 13.2 | 60 | 8 | 13.3 |
| 1977-78 | 653 | 187 | 28.6 | 1,786 | 261 | 14.6 | 39 | 5 | 12.8 |
| 1978-79 | 678 | 274 | 40.4 | 1,647 | 255 | 15.5 | 46 | 7 | 15.2 |
| 1979-80 | 683 | 311 | 45.5 | 1,817 | 286 | 15.7 | 40 | 4 | 10.0 |
| 1980-81 | 776 | 388 | 50.0 | 1,832 | 326 | 17.8 | 60 | 4 | 6.7 |
| 1981-82 | 846 | 430 | 50.8 | 1,892 | 383 | 20.2 | 22 | 2 | 10.0 |
| 1982-83 | 1,099 | 642 | 58.4 | 2,091 | 488 | 23.3 | 72 | 17 | 23.6 |
| 1983-84 | 1,272 | 739 | 58.1 | 1,802 | 415 | 23.0 | 121 | 21 | 17.4 |
| 1984-85 | 1,157 | 708 | 61.2 | 1,796 | 419 | 23.3 | 105 | 17 | 16.2 |
| 1985-86 | 1,197 | 778 | 65.0 | 1,924 | 483 | 25.1 | 54 | 6 | 11.1 |
| TOTAL | 11,903 | 4,855 | 40.8 | 24,988 | 4,061 | 16.3 | 840 | 97 | 11.5 |

FIELD: Law

SOURCE: A Review of Legal Education in the United States - Fall 1977 and Fall 1986, American Bar Association Section of Legal Education and Admission to the Bar©, American Bar Assocation.

## TABLE 3-18

FIRST YEAR AND TOTAL ENROLLMENTS IN ABA APPROVED LAW SCHOOLS BY SEX AND ETHNICITY, SELECTED YEARS 1969-70 - 1986-87

| | TOTAL | WOMEN | | BLACK | | HISPANIC* | | ASIAN/PACIFIC ISLANDER | | AM. INDIAN/ ALASKAN NATIVE | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | NO. | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % |
| 1969-70 | 29,128 | 2,103 | 7.22 | 1,115 | 3.83 | 309 | 1.06 | * | | 44 | 0.15 |
| | 68,386 | 4,715 | 6.89 | 2,128 | 3.11 | 548 | 0.80 | | | 72 | 0.11 |
| 1971-72 | 36,171 | 4,326 | 11.96 | 1,716 | 4.74 | 526 | 1.45 | 254 | 0.70 | 71 | 0.20 |
| | 94,468 | 8,914 | 9.44 | 3,744 | 4.02 | 1,156 | 1.24 | 480 | 0.52 | 140 | 0.15 |
| 1973-74 | 37,108 | 7,464 | 20.11 | 1,943 | 5.25 | 729 | 1.97 | 327 | 0.88 | 109 | 0.29 |
| | 106,102 | 16,760 | 15.80 | 4,817 | 4.54 | 1,700 | 1.60 | 850 | 0.80 | 222 | 0.21 |
| 1975-76 | 39,038 | 10,472 | 26.83 | 2,045 | 5.24 | 818 | 2.10 | 436 | 1.12 | 118 | 0.30 |
| | 116,991 | 26,737 | 22.85 | 5,127 | 4.38 | 2,182 | 1.87 | 1,099 | 0.94 | 295 | 0.25 |
| 1976-77 | 39,996 | 11,354 | 28.39 | 2,128 | 5.32 | 953 | 2.38 | 484 | 1.21 | 133 | 0.33 |
| | 117,451 | 29,538 | 29.15 | 5,503 | 4.69 | 2,461 | 2.10 | 1,324 | 1.13 | 301 | 0.26 |
| 1977-78 | 39,676 | 11,928 | 30.06 | 1,945 | 4.90 | 983 | 2.48 | 509 | 1.28 | 137 | 0.35 |
| | 118,557 | 32,538 | 27.45 | 5,304 | 4.48 | 2,531 | 2.13 | 1,382 | 1.67 | 363 | 0.31 |
| 1978-79 | 40,479 | 13,324 | 32.92 | 2,021 | 5.00 | 1,078 | 2.66 | 557 | 1.38 | 145 | 0.36 |
| | 121,606 | 36,808 | 30.27 | 5,350 | 4.40 | 2,788 | 2.29 | 1,424 | 1.17 | 390 | 0.32 |
| 1979-80 | 40,717 | 13,490 | 33.13 | 2,002 | 4.92 | 1,075 | 2.64 | 577 | 1.42 | 171 | 0.42 |
| | 122,860 | 38,627 | 31.43 | 5,257 | 4.28 | 2,817 | 2.29 | 1,547 | 1.26 | 392 | 0.32 |
| 1980-81 | 42,296 | 15,272 | 36.11 | 2,144 | 5.07 | 1,176 | 2.78 | 641 | 1.52 | 163 | 0.39 |
| | 125,397 | 42,122 | 33.59 | 5,506 | 4.39 | 3,014 | 2.40 | 1,641 | 1.31 | 415 | 0.33 |
| 1981-82 | 42,521 | 15,811 | 37.18 | 2,238 | 5.26 | 1,266 | 2.98 | 650 | 1.52 | 160 | 0.38 |
| | 127,312 | 44,092 | 35.26 | 5,789 | 4.54 | 3,189 | 2.50 | 1,755 | 1.38 | 402 | 0.32 |
| 1982-83 | 42,034 | 16,136 | 38.39 | 2,217 | 5.27 | 1,319 | 3.14 | 731 | 1.74 | 154 | 0.37 |
| | 127,828 | 47,083 | 36.83 | 5,852 | 4.58 | 3,406 | 2.66 | 1,947 | 1.52 | 406 | 0.32 |
| 1983-84 | 41,159 | 16,049 | 38.99 | 2,247 | 5.46 | 1,266 | 3.08 | 711 | 1.73 | 169 | 0.41 |
| | 127,195 | 41,159 | 32.36 | 5,967 | 4.69 | 3,496 | 2.75 | 1,962 | 1.54 | 441 | 0.35 |
| 1984-85 | 40,747 | 16,236 | 39.85 | 2,214 | 5.43 | 1,276 | 3.13 | 766 | 1.88 | 173 | 0.42 |
| | 125,698 | 48,499 | 38.58 | 5,955 | 4.74 | 3,507 | 2.79 | 2,062 | 1.61 | 429 | 0.34 |
| 1985-86 | 40,796 | 16,510 | 40.47 | 2,183 | 5.35 | 1,369 | 3.36 | 799 | 1.96 | 183 | 0.45 |
| | 124,092 | 49,050 | 39.53 | 6,501 | 5.24 | 3,679 | 2.96 | 2,153 | 1.74 | 463 | 0.37 |
| 1986-87 | 40,195 | 16,491 | 41.03 | 2,159 | 5.37 | 1,474 | 3.67 | 929 | 2.31 | 176 | 0.44 |
| | 123,277 | 49,522 | 40.17 | 5,894 | 4.78 | 3,865 | 3.14 | 2,303 | 1.87 | 488 | 0.40 |

*Excludes University of Puerto Rico.

FIELD: Legal and Kindred

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, September 30, 1986

## TABLE 3-19

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN LEGAL AND KINDRED OCCUPATIONS BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | ASIAN | | AM. INDIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | % | Women | % W | No. | % B | No. | % H | No. | % A | No. | % I | No. | % W |
| Law Clerk | 303 | 198 | 65.3 | 68 | 17.8 | 46 | 12.0 | 45 | 11.7 | 12 | 3.1 | 9 | 2.3 | 2 | 0.5 | 314 | 82.2 |
| General Attorney | 18,041 | 5,293 | 29.3 | 1,819 | 10.1 | 734 | 4.1 | 1,179 | 6.5 | 434 | 2.4 | 172 | 1.0 | 34 | 0.2 | 16,222 | 89.9 |
| Hearings and Appeals | 1,261 | 259 | 20.5 | 153 | 12.1 | 59 | 4.7 | 86 | 6.8 | 28 | 2.2 | 35 | 2.8 | 4 | 0.3 | 1,108 | 87.9 |
| Administrative Law Judge | 1,052 | 44 | 4.2 | 56 | 5.3 | 7 | 0.7 | 24 | 2.3 | 24 | 2.3 | 4 | 0.4 | 4 | 0.4 | 996 | 94.7 |
| Paralegal Specialist | 2,936 | 1,981 | 67.5 | 737 | 25.1 | 590 | 20.1 | 575 | 19.6 | 98 | 3.3 | 46 | 1.6 | 18 | 0.6 | 2,199 | 74.9 |
| Patent Attorney | 209 | 8 | 3.8 | 7 | 3.3 | 0 | 0.0 | 4 | 1.9 | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 | 202 | 96.7 |
| Patent Classifying | 61 | 8 | 13.1 | 15 | 24.6 | 4 | 6.6 | 10 | 16.4 | 1 | 1.6 | 3 | 4.9 | 1 | 1.6 | 46 | 75.4 |
| Patent Examining | 1,329 | 191 | 14.4 | 230 | 17.3 | 61 | 4.6 | 129 | 9.7 | 19 | 1.4 | 81 | 6.1 | 1 | 0.1 | 1,099 | 82.7 |
| Land Law Examiner | 349 | 277 | 79.4 | 79 | 22.6 | 69 | 19.8 | 25 | 7.2 | 42 | 12.0 | 6 | 1.7 | 6 | 1.7 | 270 | 77.4 |
| Passport and Visa Examiner | 1,340 | 561 | 41.9 | 302 | 22.5 | 172 | 12.8 | 199 | 14.9 | 57 | 4.3 | 39 | 2.9 | 7 | 0.5 | 1,038 | 77.5 |
| Tax Law Specialist | 495 | 146 | 29.5 | 79 | 16.0 | 41 | 8.3 | 57 | 11.5 | 12 | 2.4 | 10 | 2.0 | 0 | 0.0 | 416 | 84.0 |
| General Claims Examiner | 127 | 67 | 52.8 | 36 | 28.3 | 23 | 18.1 | 27 | 21.3 | 4 | 3.1 | 4 | 3.1 | 1 | 0.8 | 91 | 71.7 |
| Workers Compensation Claims | 622 | 305 | 49.0 | 166 | 26.7 | 113 | 18.2 | 130 | 20.9 | 19 | 3.1 | 14 | 2.3 | 3 | 0.5 | 456 | 73.3 |
| Social Ins. Claims Examiner | 9,711 | 6,138 | 63.2 | 3,594 | 37.0 | 2,965 | 30.5 | 3,313 | 34.1 | 159 | 1.6 | 110 | 1.1 | 12 | 0.1 | 6,117 | 63.0 |
| Veterans Claims Examiner | 2,317 | 823 | 35.5 | 407 | 17.6 | 249 | 10.7 | 294 | 12.7 | 80 | 3.5 | 26 | 1.1 | 7 | 0.3 | 1,910 | 82.4 |
| Civil Serv. Ret. Claims Exam. | 336 | 127 | 70.5 | 131 | 39.0 | 105 | 31.3 | 130 | 38.7 | 0 | 0.0 | 1 | 0.3 | 0 | 0.0 | 205 | 61.0 |

SOURCE: 1980 Census of Population, Supplementary Report, May 1981, U.S. Department of Commerce

**TABLE 4-1**

POPULATION OF THE UNITED STATES BY AGE, SEX, RACE AND SPANISH ORIGIN, 1980

| AGE | Total No. | % Female | PERCENT BY RACE AND SEX | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | White | | Black | | Native Am. | | Asian | | Other Race | | HISPANIC* | |
| | | | % W | % F | % B | % F | % N.A. | % F | % A | % F | % O | % F | % H | % F |
| All Ages | 226,504,825 | 51.4 | 83.2 | 51.3 | 11.7 | 52.8 | 0.6 | 50.6 | 1.6 | 51.6 | 3.0 | 54.4 | 6.5 | 50.2 |
| Under 5 | 16,344,407 | 48.9 | 77.3 | 48.7 | 14.9 | 49.6 | 0.9 | 49.2 | 1.8 | 49.5 | 5.1 | 48.9 | 10.2 | 49.0 |
| 5 - 9 | 16,697,134 | 48.9 | 78.0 | 48.7 | 14.9 | 49.6 | 0.9 | 49.5 | 1.8 | 49.1 | 4.4 | 49.0 | 9.2 | 47.8 |
| 10 - 14 | 18,240,919 | 48.9 | 79.3 | 48.8 | 14.7 | 49.7 | 0.9 | 49.0 | 1.5 | 48.7 | 3.7 | 49.3 | 8.1 | 49.4 |
| 15 - 19 | 21,161,667 | 49.2 | 80.1 | 49.1 | 14.1 | 50.1 | 0.8 | 49.4 | 1.1 | 48.3 | 3.6 | 48.0 | 7.1 | 51.8 |
| 20 - 24 | 21,312,557 | 50.0 | 81.1 | 49.8 | 12.8 | 52.3 | 0.7 | 49.8 | 1.5 | 50.9 | 3.9 | 46.4 | 7.4 | 48.3 |
| 25 - 29 | 19,517,672 | 50.3 | 81.9 | 49.9 | 11.9 | 53.3 | 0.6 | 50.8 | 1.9 | 53.9 | 3.7 | 46.8 | 7.1 | 49.3 |
| 30 - 34 | 17,557,957 | 50.6 | 83.4 | 50.2 | 10.8 | 53.9 | 0.6 | 51.1 | 2.1 | 54.4 | 3.1 | 48.2 | 6.4 | 50.5 |
| 35 - 39 | 13,963,008 | 50.9 | 84.2 | 50.4 | 10.4 | 54.6 | 0.6 | 51.2 | 2.0 | 52.5 | 2.8 | 49.3 | 6.1 | 51.3 |
| 40 - 44 | 11,668,239 | 51.1 | 84.2 | 50.7 | 10.7 | 50.7 | 0.6 | 51.3 | 1.9 | 51.1 | 2.6 | 50.0 | 6.1 | 51.6 |
| 45 - 49 | 11,088,383 | 51.4 | 85.3 | 51.0 | 10.3 | 54.9 | 0.5 | 51.9 | 1.6 | 54.3 | 2.3 | 50.7 | 5.6 | 51.7 |
| 50 - 54 | 11,708,984 | 52.0 | 86.7 | 51.6 | 9.6 | 55.3 | 0.4 | 51.6 | 1.4 | 55.8 | 1.8 | 51.8 | 4.8 | 52.1 |
| 55 - 59 | 11,614,054 | 52.8 | 88.1 | 52.6 | 8.9 | 55.0 | 0.4 | 52.1 | 1.1 | 53.0 | 1.4 | 51.4 | 3.9 | 52.2 |
| 60 - 64 | 10,085,711 | 53.7 | 89.0 | 53.5 | 8.6 | 55.8 | 0.3 | 52.9 | 1.0 | 53.9 | 1.0 | 53.7 | 3.2 | 54.1 |
| 65 - 69 | 8,780,844 | 55 6 | 89.0 | 55.4 | 8.8 | 57.3 | 0.3 | 54.8 | 0.9 | 50.9 | 1.0 | 55.9 | 3.0 | 56.2 |
| 70 - 74 | 6,796,762 | 58.0 | 89.7 | 58.1 | 8.3 | 58.4 | 0.3 | 55.7 | 0.9 | 46.6 | 0.9 | 55.7 | 2.9 | 56.1 |
| 75 - 79 | 4,792,597 | 59.4 | 89.9 | 61.7 | 8.1 | 60.6 | 0.3 | 55.7 | 0.8 | 49.8 | 0.9 | 56.4 | 2.9 | 56.8 |
| 80 - 84 | 2,934,229 | 65.3 | 91.5 | 65.6 | 6.8 | 62.5 | 0.2 | 59.4 | 0.7 | 57.3 | 0.7 | 57.8 | 1.9 | 58.8 |
| 85 & Over | 2,239,721 | 69.6 | 91.3 | 70.0 | 7.1 | 66.7 | 0.3 | 60.8 | 0.6 | 62.4 | 0.7 | 59.6 | 2.2 | 62.0 |
| Median Age | 30.0 | 31.3 | 31.3 | 32.6 | 24.9 | 26.2 | 23.0 | 23.5 | 28.6 | 29 3 | 22.3 | 22.4 | 23.2 | 23.3 |

* Persons of Hispanic Origin may be of any race.

SOURCE: "Labor Force Projections: 1986 to 2000," Monthly Labor Review, September 1987

## TABLE 4-2

## CIVILIAN LABOR FORCE BY SEX, AGE, RACE/ETHNICITY, 1972 AND 1979, MODERATE PROJECTIONS TO 2000

| Group | Level (in thousands) | | | | Change (in thousands) | | | Percent change | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1972 | 1979 | 1986 | Projected, 2000 | 1972–79 | 1979–86 | 1986–2000 | 1972–79 | 1979–86 | 1986–2000 |
| Total, 16 and over | 87,037 | 104,960 | 117,837 | 138,775 | 17,923 | 12,877 | 20,938 | 20.6 | 12.3 | 17.8 |
| Men, 16 and over | 53,556 | 60,727 | 65,423 | 73,136 | 7,171 | 4,696 | 7,713 | 13.4 | 7.7 | 11.8 |
| 16 to 24 | 11,243 | 13,645 | 12,251 | 11,506 | 2,402 | -1,394 | -745 | 21.4 | -10.2 | -6.1 |
| 25 to 54 | 33,133 | 37,926 | 44,406 | 53,024 | 4,793 | 6,480 | 8,618 | 14.5 | 17.1 | 19.4 |
| 55 and over | 9,180 | 9,156 | 8,766 | 8,606 | -24 | -390 | -160 | -.3 | -4.3 | -1.8 |
| Women, 16 and over | 33,481 | 44,233 | 52,414 | 65,639 | 10,752 | 8,181 | 13,225 | 32.1 | 18.5 | 25.2 |
| 16 to 24 | 8,943 | 11,760 | 11,117 | 11,125 | 2,817 | -643 | 8 | 31.5 | -5.5 | .1 |
| 25 to 54 | 19,192 | 26,594 | 35,159 | 47,756 | 7,402 | 8,565 | 12,597 | 38.6 | 32.2 | 35.8 |
| 55 and over | 5,346 | 5,879 | 6,138 | 6,758 | 533 | 259 | 620 | 10.0 | 4.4 | 10.1 |
| White, 16 and over | 77,275 | 91,922 | 101,801 | 116,701 | 14,647 | 9,879 | 14,900 | 19.0 | 10.7 | 14.6 |
| Black, 16 and over | 8,748 | 10,665 | 12,684 | 16,334 | 1,917 | 2,019 | 3,650 | 21.9 | 18.9 | 28.8 |
| Asian and other,[1] 16 and over | — | 2,373 | 3,352 | 5,740 | — | 979 | 2,388 | — | 41.3 | 71.2 |
| Hispanic,[2] 16 and over | — | 5,215 | 8,076 | 14,086 | — | 2,861 | 6,010 | — | 54.9 | 74.4 |

| | Percent distribution | | | | Growth rate | | |
|---|---|---|---|---|---|---|---|
| | 1972 | 1979 | 1986 | Projected, 2000 | 1972–79 | 1979–86 | 1986–2000 |
| Total, 16 and over | 100.0 | 100.0 | 100.0 | 100.0 | 2.7 | 1.7 | 1.2 |
| Men, 16 and over | 61.5 | 57.9 | 55.5 | 52.7 | 1.8 | 1.1 | .8 |
| 16 to 25 | 12.9 | 13.0 | 10.4 | 8.3 | 2.8 | -1.5 | -.4 |
| 25 to 54 | 38.1 | 36.1 | 37.7 | 38.2 | 1.9 | 2.3 | 1.3 |
| 55 and over | 10.5 | 8.7 | 7.4 | 6.2 | (3) | -.6 | -.1 |
| Women, 16 and over | 38.5 | 42.1 | 44.5 | 47.3 | 4.1 | 2.5 | 1.6 |
| 16 to 24 | 10.3 | 11.2 | 9.4 | 8.0 | 4.0 | -.8 | (3) |
| 25 to 54 | 22.1 | 25.3 | 29.8 | 34.4 | 4.8 | 4.1 | 2.2 |
| 55 and over | 6.1 | 5.6 | 5.2 | 4.9 | 1.4 | .6 | .7 |
| White, 16 and over | 88.8 | 87.6 | 86.4 | 84.1 | 2.5 | 1.5 | 1.0 |
| Black, 16 and over | 10.1 | 10.2 | 10.8 | 11.8 | 2.9 | 2.5 | 1.8 |
| Asian and other,[1] 16 and over | — | 2.3 | 2.8 | 4.1 | — | 5.1 | 3.9 |
| Hispanic,[2] 16 and over | — | 5.0 | 6.9 | 10.2 | — | 6.4 | 4.1 |

[1] The "Asian and other" group includes American Indians, Alaskan Natives, Asians, and Pacific Islanders. The historic data are derived by subtracting "Black" from the "Black and other" group; projections are made directly.

[2] Persons of Hispanic origin may be of any race. Labor force data for Hispanics are not available before 1976.

[3] The rate is -0.05 to 0.05 percent.

NOTE: Dash indicates data not available.

## CIVILIAN LABOR FORCE PARTICIPATION BY SEX, AGE, RACE/ETHNICITY, 1972, 1979, 1986 AND 2000

## TABLE 4-3

| Group | Actual | | | Projected, 2000 | Growth rate | | |
|---|---|---|---|---|---|---|---|
| | 1972 | 1979 | 1986 | | 1972–79 | 1979–86 | 1986–2000 |
| Total, 16 and over | 60.4 | 63.7 | 65.3 | 67.8 | .8 | .4 | .3 |
| Men, 16 and over | 79.0 | 77.8 | 76.3 | 74.7 | -.2 | -.3 | -.2 |
| 16 to 24 | 71.3 | 75.0 | 73.0 | 74.3 | .7 | -.4 | .1 |
| 25 to 54 | 95.1 | 94.4 | 93.8 | 92.6 | -.1 | -.1 | -.1 |
| 55 and over | 53.3 | 46.6 | 40.4 | 34.1 | -1.9 | -2.0 | -1.2 |
| Women, 16 and over | 43.9 | 50.9 | 55.3 | 61.5 | 2.1 | 1.2 | .8 |
| 16 to 24 | 53.0 | 62.5 | 64.3 | 69.5 | 2.4 | .4 | .6 |
| 25 to 54 | 51.0 | 62.3 | 70.8 | 80.8 | 2.9 | 1.8 | .9 |
| 55 and over | 24.5 | 23.2 | 22.1 | 21.4 | -.8 | -.7 | -.2 |
| White, 16 and over | 60.4 | 63.9 | 65.5 | 68.2 | .8 | .4 | .3 |
| Black, 16 and over | 60.2 | 61.4 | 63.5 | 66.0 | .3 | .5 | .3 |
| Asian and other,[1] 16 and over | — | 65.9 | 64.9 | 65.8 | — | -.2 | .1 |
| Hispanic,[2] 16 and over | — | 63.5 | 65.4 | 68.7 | — | .4 | .4 |

[1] The "Asian and other" group includes American Indians, Alaskan Natives, Asians, and Pacific Islanders. The historic data are derived by subtracting "Black" from the "Black and other" group; projections are made directly.

[2] Persons of Hispanic origin may be of any race. Labor force data for Hispanics are not available before 1976.

NOTE: Dash indicates data not available.

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 4-4

## OCCUPATION OF EMPLOYED PERSONS 16 AND OVER, BY YEARS OF SCHOOL COMPLETED, SEX, AND RACE/ETHNICITY, MARCH 1986

| Sex, race, and occupation | Total employed in thousands | Percentage distribution, by years of school completed | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | Elementary school | | High school | | College | | Median school years completed |
| | | | Less than 8 years[1] | 8 years | 1 to 3 years | 4 years | 1 to 3 years | 4 years or more | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **All persons** | | | | | | | | | |
| All occupational groups | 107,381 | 100.0 | 5.6 | 2.6 | 11.4 | 40.1 | 20.4 | 22.4 | 12.8 |
| Managerial and professional specialty | 26,288 | 100.0 | 0.8 | 0.4 | 2.4 | 17.2 | 19.5 | 60.1 | 16.3 |
| Technical, sales, and administrative support | 34,035 | 100.0 | 1.5 | 0.8 | 7.4 | 46.1 | 27.5 | 17.6 | 12.9 |
| Service occupations | 14,888 | 100.0 | 10.3 | 4.6 | 21.5 | 44.8 | 18.0 | 5.3 | 12.4 |
| Precision production, craft, and repair | 13,065 | 100.0 | 8.3 | 4.2 | 14.9 | 53.0 | 18.0 | 5.8 | 12.5 |
| Operators, fabricators, and laborers | 16,327 | 100.0 | 13.2 | 5.9 | 21.4 | 49.7 | 12.7 | 3.1 | 12.3 |
| Farming, forestry, and fishing | 2,978 | 100.0 | 20.5 | 8.3 | 18.6 | 41.9 | 11.7 | 7.3 | 12.3 |
| **White men** | | | | | | | | | |
| All occupational groups | 52,504 | 100.0 | 6.6 | 3.2 | 11.4 | 37.4 | 19.5 | 25.1 | 12.9 |
| Managerial and professional specialty | 13,640 | 100.0 | 1.0 | 0.5 | 2.5 | 15.3 | 18.4 | 62.8 | 16.4 |
| Technical, sales, and administrative support | 10,763 | 100.0 | 2.0 | 1.1 | 6.0 | 35.9 | 27.3 | 28.8 | 13.7 |
| Service occupations | 4,690 | 100.0 | 9.7 | 3.8 | 20.5 | 39.2 | 22.0 | 8.6 | 12.5 |
| Precision production, craft, and repair | 10,857 | 100.0 | 8.2 | 4.2 | 14.1 | 53.4 | 18.7 | 5.5 | 12.5 |
| Operators, fabricators, and laborers | 10,264 | 100.0 | 12.9 | 6.1 | 20.4 | 49.5 | 14.0 | 3.2 | 12.3 |
| Farming, forestry, and fishing | 2,290 | 100.0 | 21.1 | 8.7 | 18.5 | 40.9 | 11.5 | 8.0 | 12.3 |
| **Black men** | | | | | | | | | |
| All occupational groups | 5,237 | 100.0 | 9.1 | 2.8 | 18.4 | 39.8 | 19.8 | 12.8 | 12.6 |
| Managerial and professional specialty | 684 | 100.0 | 2.6 | 1.3 | 3.2 | 17.8 | 22.7 | 53.5 | 16.1 |
| Technical, sales, and administrative support | 925 | 100.0 | 3.1 | 0.9 | 9.1 | 36.3 | 35.1 | 16.3 | 13.1 |
| Service occupations | 956 | 100.0 | 9.0 | 3.3 | 23.8 | 43.3 | 18.7 | 5.1 | 12.4 |
| Precision production, craft, and repair | 825 | 100.0 | 6.4 | 2.8 | 21.2 | 46.5 | 17.3 | 6.5 | 12.4 |
| Operators, fabricators, and laborers | 1,672 | 100.0 | 12.8 | 3.7 | 24.5 | 46.1 | 13.6 | 3.0 | 12.3 |
| Farming, forestry, and fishing | 176 | 100.0 | 35.8 | 9.1 | 26.1 | 33.0 | 5.1 | 0.6 | 10.7 |
| **Men of Hispanic origin[2]** | | | | | | | | | |
| All occupational groups | 4,271 | 100.0 | 28.2 | 5.9 | 16.9 | 31.0 | 14.4 | 9.4 | 12.2 |
| Managerial and professional specialty | 477 | 100.0 | 9.9 | 1.3 | 9.7 | 20.8 | 19.1 | 48.4 | 15.6 |
| Technical, sales, and administrative support | 677 | 100.0 | 8.1 | 2.5 | 10.0 | 39.6 | 29.4 | 12.9 | 12.8 |
| Service occupations | 682 | 100.0 | 30.9 | 7.5 | 20.8 | 29.0 | 15.7 | 3.4 | 11.7 |
| Precision production, craft, and repair | 858 | 100.0 | 29.8 | 6.3 | 18.5 | 35.9 | 11.4 | 4.4 | 12.0 |
| Operators, fabricators, and laborers | 1,313 | 100.0 | 36.5 | 7.8 | 21.4 | 31.9 | 8.8 | 1.3 | 10.9 |
| Farming, forestry, and fishing | 255 | 100.0 | 66.8 | 9.1 | 16.2 | 12.5 | 2.6 | 1.9 | 7.1 |
| **White women** | | | | | | | | | |
| All occupational groups | 41,293 | 100.0 | 3.7 | 1.9 | 10.5 | 44.0 | 21.6 | 20.3 | 12.8 |
| Managerial and professional specialty | 10,284 | 100.0 | 0.4 | 0.3 | 2.2 | 20.2 | 21.0 | 56.2 | 16.2 |
| Technical, sales, and administrative support | 19,406 | 100.0 | 1.1 | 0.7 | 8.0 | 53.0 | 26.5 | 11.4 | 12.8 |
| Service occupations | 6,952 | 100.0 | 9.3 | 4.7 | 21.7 | 48.6 | 16.6 | 3.7 | 12.4 |
| Precision production, craft, and repair | 909 | 100.0 | 8.9 | 4.6 | 19.5 | 56.4 | 11.2 | 4.0 | 12.4 |
| Operators, fabricators, and laborers | 3,296 | 100.0 | 14.5 | 6.6 | 23.7 | 50.9 | 8.6 | 2.3 | 12.2 |
| Farming, forestry, and fishing | 446 | 100.0 | 11.0 | 6.5 | 17.9 | 49.6 | 15.5 | 6.1 | 12.4 |
| **Black women** | | | | | | | | | |
| All occupational groups | 5,328 | 100.0 | 6.1 | 3.0 | 14.2 | 42.3 | 22.3 | 15.1 | 12.7 |
| Managerial and professional specialty | 909 | 100.0 | 0.4 | 0.2 | 2.5 | 16.6 | 22.4 | 58.0 | 16.2 |
| Technical, sales, and administrative support | 2,042 | 100.0 | 1.4 | 0.7 | 8.1 | 45.1 | 33.9 | 11.6 | 12.9 |
| Service occupations | 1,550 | 100.0 | 13.4 | 5.7 | 25.2 | 47.5 | 12.5 | 1.3 | 12.2 |
| Precision production, craft, and repair | 159 | 100.0 | 10.7 | 7.5 | 17.6 | 51.6 | 13.8 | 5.7 | 12.4 |
| Operators, fabricators, and laborers | 664 | 100.0 | 10.1 | 6.0 | 22.3 | 54.8 | 4.1 | 1.7 | 12.3 |
| Farming, forestry, and fishing | 4 | 100.0 | [3] | [3] | [3] | [3] | [3] | [3] | [3] |
| **Women of Hispanic origin[2]** | | | | | | | | | |
| All occupational groups | 2,736 | 100.0 | 19.3 | 5.1 | 15.8 | 37.4 | 17.4 | 10.1 | 12.4 |
| Managerial and professional specialty | 376 | 100.0 | 1.9 | 0.8 | 5.9 | 22.1 | 22.9 | 47.3 | 15.2 |
| Technical, sales, and administrative support | 1,116 | 100.0 | 4.4 | 2.1 | 12.5 | 49.1 | 27.7 | 6.4 | 12.7 |
| Service occupations | 645 | 100.0 | 35.2 | 7.9 | 21.2 | 34.0 | 7.9 | 1.7 | 11.1 |
| Precision production, craft, and repair | 100 | 100.0 | 30.0 | 10.0 | 21.0 | 37.0 | 9.0 | 3.0 | 11.9 |
| Operators, fabricators, and laborers | 461 | 100.0 | 42.5 | 10.4 | 22.3 | 27.8 | 4.6 | 2.6 | 10.0 |
| Farming, forestry, and fishing | 38 | 100.0 | [3] | [3] | [3] | [3] | [3] | [3] | [3] |

[1]Includes persons reporting no school years completed.
[2]Persons of Hispanic origin may be of any race.
[3]Because of small sample size, percentages not shown where base is less than 75,000.

NOTE.—Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, "Educational Attainment of Workers, March 1986." (This table was prepared October 1986.)

SOURCE: Bureau of Labor Statistics

## TABLE 4-5

## PROFESSIONAL OCCUPATIONS OF EMPLOYED PERSONS AGE 25-44 WITH SOME COLLEGE BY YEARS OF COLLEGE COMPLETED AND SEX, 1987

(numbers in thousands)

| WOMEN | ----- 1 TO 3 YEARS OF COLLEGE ---- | | | | --- 4 YEARS OF COLLEGE OR MORE --- | | | | MEDIAN SCHOOL YEARS COMPLETED |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | 1 YEAR | 2 YEARS | 3 YEARS | TOTAL | 4 YEARS | 5 YEARS | 6 YEARS OR MORE | |
| TOTAL. . . . . | 6055 | 2150 | 2950 | 955 | 7081 | 4410 | 921 | 1750 | 13.0 |
| MANAGERIAL & PROFESSIONAL SPECIALTY. | 1607 | 381 | 795 | 430 | 4774 | 2570 | 700 | 1496 | 16.3 |
| EXECUTIVE, ADMINISTR., & MANAGERIAL | 798 | 253 | 412 | 133 | 1218 | 783 | 123 | 311 | 14.6 |
| OFFICIALS & ADMINISTRATORS, PUBLIC | 28 | 15 | 10 | 2 | 41 | 28 | 3 | 11 | 13.6 |
| OTHER EXECUTIVE, ADMIN. & MANAGER. | 460 | 144 | 239 | 77 | 709 | 417 | 89 | 202 | 14.5 |
| MANAGEMENT RELATED OCCUPATIONS . . | 310 | 94 | 162 | 54 | 468 | 338 | 31 | 99 | 14.8 |
| PROFESSIONAL SPECIALTY OCCUPATIONS. | 809 | 128 | 383 | 298 | 3556 | 1795 | 576 | 1185 | 16.6 |
| ENGINEERS. . . . . | 5 | 1 | 4 | 0 | 75 | 41 | 14 | 20 | 16.7 |
| MATHEMATICAL & COMPUTER SCIENTISTS | 45 | 8 | 32 | 5 | 118 | 74 | 8 | 36 | 16.3 |
| NATURAL SCIENTISTS . . . . . | 5 | 0 | 0 | 5 | 53 | 20 | 7 | 26 | 17.5 |
| HEALTH DIAGNOSING OCCUPATIONS. . . | 4 | 0 | 4 | 0 | 88 | 2 | 8 | 78 | 18+ |
| HEALTH ASSESSMENT AND TREATING . . | 441 | 30 | 204 | 207 | 722 | 447 | 133 | 142 | 16.2 |
| TEACHERS, COLLEGE AND UNIVERSITY . | 8 | 1 | 2 | 6 | 141 | 27 | 30 | 84 | 18+ |
| TEACHERS, EXCEPT COLLEGE AND UNIV. | 125 | 28 | 67 | 30 | 1546 | 801 | 287 | 458 | 16.8 |
| LAWYERS AND JUDGES . . . . . | 2 | 2 | 1 | 0 | 99 | 3 | 9 | 87 | 18+ |
| OTHER PROFESSIONAL SPECIALTY . . . | 172 | 59 | 69 | 45 | 716 | 381 | 82 | 254 | 16.5 |
| TECHNICAL, SALES, & ADMIN. SUPPORT . | 3353 | 1307 | 1635 | 410 | 1856 | 1478 | 181 | 198 | 12.9 |
| TECHNICIANS AND RELATED SUPPORT . . | 378 | 132 | 187 | 59 | 369 | 278 | 49 | 42 | 14.3 |
| HEALTH TECHNOLOGISTS & TECHNICIANS | 251 | 88 | 119 | 44 | 144 | 115 | 22 | 7 | 13.9 |
| ENGINEERING & SCIENCE TECHNICIANS. | 50 | 17 | 28 | 5 | 53 | 42 | 6 | 6 | 14.3 |
| TECH., EXC. HEALTH, ENGIN. & SCI . | 77 | 26 | 40 | 11 | 172 | 121 | 22 | 29 | 16.1 |
| SALES OCCUPATIONS . . . . . | 627 | 221 | 316 | 91 | 558 | 443 | 49 | 66 | 12.8 |
| SUPERVISORS AND PROPRIETORS. . . . | 129 | 47 | 69 | 13 | 127 | 110 | 6 | 11 | 12.9 |
| SALES REPRES., FINANCE & BUS. SERV | 180 | 54 | 92 | 34 | 169 | 138 | 11 | 20 | 14.3 |
| SALES REP., COMMODIT., EXC. RETAIL | 47 | 12 | 32 | 4 | 74 | 55 | 9 | 10 | 14.9 |
| SALES WORKERS, RETAIL & PERSONAL . | 269 | 107 | 122 | 39 | 183 | 137 | 22 | 25 | 12.7 |
| SALES RELATED OCCUPATIONS. . . . . | 1 | 1 | 0 | 0 | 5 | 4 | 0 | 1 | 12.8 |
| ADMIN. SUPPORT, INCLUDING CLERICAL. | 2348 | 954 | 1132 | 261 | 929 | 757 | 83 | 90 | 12.9 |
| SUPERVISORS. . . . . | 85 | 34 | 41 | 10 | 44 | 36 | 4 | 4 | 13.3 |
| COMPUTER EQUIPMENT OPERATORS . . . | 74 | 16 | 47 | 11 | 19 | 15 | 2 | 1 | 12.7 |
| SECRETARIES, STENOGRAPH., & TYPIST | 844 | 356 | 385 | 103 | 310 | 240 | 29 | 34 | 12.9 |
| FINANCIAL RECORDS PROCESSING . . . | 301 | 155 | 183 | 43 | 154 | 122 | 17 | 15 | 12.9 |
| MAIL AND MESSAGE DISTRIBUTING. . . | 63 | 27 | 30 | 6 | 22 | 22 | 0 | 0 | 12.9 |
| OTHER ADMINISTRATIVE SUPPORT . . . | 902 | 367 | 447 | 88 | 380 | 315 | 31 | 35 | 12.8 |

| MEN | ----- 1 TO 3 YEARS OF COLLEGE ---- | | | | --- 4 YEARS OF COLLEGE OR MORE --- | | | | MEDIAN SCHOOL YEARS COMPLETED |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | 1 YEAR | 2 YEARS | 3 YEARS | TOTAL | 4 YEARS | 5 YEARS | 6 YEARS OR MORE | |
| TOTAL. . . . . | 6806 | 2270 | 3348 | 1189 | 9603 | 5574 | 955 | 3073 | 13.1 |
| MANAGERIAL & PROFESSIONAL SPECIALTY. | 1453 | 382 | 715 | 355 | 6140 | 2936 | 649 | 2555 | 16.6 |
| EXECUTIVE, ADMINISTR., & MANAGERIAL | 949 | 291 | 439 | 219 | 2541 | 1600 | 231 | 711 | 16.2 |
| OFFICIALS & ADMINISTRATORS, PUBLIC | 11 | 1 | 6 | 4 | 95 | 45 | 16 | 34 | 16.6 |
| OTHER EXECUTIVE, ADMIN. & MANAGER. | 731 | 235 | 341 | 155 | 1691 | 1059 | 154 | 479 | 16.1 |
| MANAGEMENT RELATED OCCUPATIONS . . | 208 | 55 | 93 | 60 | 755 | 496 | 60 | 199 | 16.4 |
| PROFESSIONAL SPECIALTY OCCUPATIONS. | 503 | 91 | 276 | 136 | 3599 | 1336 | 418 | 1845 | 17.2 |
| ENGINEERS. . . . . | 147 | 33 | 81 | 33 | 671 | 421 | 79 | 171 | 16.5 |
| MATHEMATICAL & COMPUTER SCIENTISTS | 56 | 9 | 30 | 17 | 248 | 145 | 22 | 81 | 16.6 |
| NATURAL SCIENTISTS . . . . . | 9 | 3 | 3 | 3 | 179 | 51 | 13 | 114 | 18+ |
| HEALTH DIAGNOSING OCCUPATIONS. . . | 3 | 0 | 0 | 3 | 375 | 10 | 7 | 358 | 18+ |
| HEALTH ASSESSMENT AND TREATING . . | 53 | 2 | 32 | 19 | 144 | 57 | 31 | 56 | 16.7 |
| TEACHERS, COLLEGE AND UNIVERSITY . | 5 | 1 | 4 | 1 | 223 | 21 | 48 | 155 | 18+ |
| TEACHERS, EXCEPT COLLEGE AND UNIV. | 38 | 5 | 21 | 11 | 603 | 248 | 100 | 256 | 17.2 |
| LAWYERS AND JUDGES . . . . . | 7 | 2 | 6 | 0 | 370 | 4 | 10 | 357 | 18+ |
| OTHER PROFESSIONAL SPECIALTY . . . | 184 | 36 | 100 | 49 | 785 | 380 | 109 | 296 | 16.6 |
| TECHNICAL, SALES, & ADMIN. SUPPORT . | 1938 | 587 | 983 | 368 | 2233 | 1653 | 221 | 359 | 14.3 |
| TECHNICIANS AND RELATED SUPPORT . . | 349 | 68 | 221 | 60 | 413 | 257 | 50 | 106 | 14.8 |
| HEALTH TECHNOLOGISTS & TECHNICIANS | 31 | 7 | 16 | 8 | 57 | 32 | 11 | 14 | 16.1 |
| ENGINEERING & SCIENCE TECHNICIANS. | 208 | 41 | 144 | 24 | 105 | 76 | 13 | 16 | 14.3 |
| TECH., EXC. HEALTH, ENGIN. & SCI . | 109 | 20 | 61 | 28 | 251 | 148 | 27 | 75 | 16.2 |
| SALES OCCUPATIONS . . . . . | 1013 | 320 | 479 | 214 | 1382 | 1058 | 131 | 193 | 14.5 |
| SUPERVISORS AND PROPRIETORS. . . . | 392 | 134 | 200 | 59 | 421 | 334 | 45 | 42 | 13.8 |
| SALES REPRES., FINANCE & BUS. SERV | 176 | 59 | 78 | 39 | 415 | 298 | 27 | 90 | 16.2 |
| SALES REP., COMMODIT., EXC. RETAIL | 192 | 48 | 94 | 50 | 372 | 286 | 46 | 39 | 15.7 |
| SALES WORKERS, RETAIL & PERSONAL . | 250 | 77 | 107 | 66 | 171 | 138 | 12 | 22 | 13.5 |
| SALES RELATED OCCUPATIONS. . . . . | 2 | 2 | 0 | 0 | 3 | 3 | 0 | 0 | 13.4 |
| ADMIN. SUPPORT, INCLUDING CLERICAL. | 575 | 198 | 283 | 94 | 436 | 338 | 40 | 60 | 13.5 |
| SUPERVISORS. . . . . | 41 | 7 | 20 | 14 | 56 | 40 | 10 | 6 | 14.4 |
| COMPUTER EQUIPMENT OPERATORS . . . | 79 | 34 | 31 | 14 | 41 | 37 | 1 | 3 | 14.0 |
| SECRETARIES, STENOGRAPH., & TYPIST | 12 | 4 | 8 | 0 | 14 | 10 | 3 | 0 | 14.3 |
| FINANCIAL RECORDS PROCESSING . . . | 20 | 3 | 14 | 4 | 38 | 33 | 0 | 4 | 15.9 |
| MAIL AND MESSAGE DISTRIBUTING. . . | 135 | 47 | 64 | 23 | 55 | 45 | 3 | 7 | 13.4 |
| OTHER ADMINISTRATIVE SUPPORT . . . | 288 | 104 | 145 | 40 | 235 | 173 | 22 | 40 | 13.0 |

SOURCE: Bureau of Labor Statistics

## TABLE 4-5 (continued)

## PROFESSIONAL OCCUPATIONS OF EMPLOYED PERSONS AGE 45-64 WITH SOME COLLEGE BY YEARS OF COLLEGE COMPLETED AND SEX, 1987

(numbers in thousands)

**WOMEN**

| | ----- 1 TO 3 YEARS OF COLLEGE ---- | | | | --- 4 YEARS OF COLLEGE OR MORE --- | | | | MEDIAN SCHOOL YEARS |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | 1 YEAR | 2 YEARS | 3 YEARS | TOTAL | 4 YEARS | 5 YEARS | 6 YEARS OR MORE | COMPLETED |
| TOTAL. . . . . | 2112 | 741 | 1001 | 370 | 2098 | 1101 | 283 | 714 | 12.7 |
| MANAGERIAL & PROFESSIONAL SPECIALTY. | 678 | 175 | 323 | 180 | 1528 | 672 | 229 | 627 | 15.9 |
| EXECUTIVE, ADMINISTR., & MANAGERIAL | 349 | 119 | 187 | 43 | 319 | 175 | 31 | 113 | 13.2 |
| OFFICIALS & ADMINISTRATORS, PUBLIC | 22 | 13 | 7 | 2 | 27 | 13 | 1 | 13 | 13.4 |
| OTHER EXECUTIVE, ADMIN. & MANAGER. | 225 | 70 | 124 | 31 | 219 | 107 | 27 | 84 | 13.2 |
| MANAGEMENT RELATED OCCUPATIONS . . | 102 | 36 | 57 | 10 | 74 | 55 | 3 | 16 | 13.2 |
| PROFESSIONAL SPECIALTY OCCUPATIONS. | 329 | 56 | 136 | 138 | 1209 | 497 | 198 | 514 | 16.6 |
| ENGINEERS. . . . . | 5 | 1 | 3 | 1 | 8 | 5 | 0 | 3 | 13.3 |
| MATHEMATICAL & COMPUTER SCIENTISTS | 14 | 4 | 7 | 3 | 15 | 2 | 0 | 13 | 15.1 |
| NATURAL SCIENTISTS . . . . . | 1 | 1 | 0 | 0 | 20 | 5 | 2 | 13 | 17.9 |
| HEALTH DIAGNOSING OCCUPATIONS. . . | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 18+ |
| HEALTH ASSESSMENT AND TREATING . . | 180 | 17 | 56 | 107 | 145 | 84 | 22 | 39 | 15.5 |
| TEACHERS, COLLEGE AND UNIVERSITY . | 5 | 0 | 5 | 0 | 66 | 10 | 8 | 48 | 18+ |
| TEACHERS, EXCEPT COLLEGE AND UNIV. | 50 | 12 | 27 | 11 | 663 | 288 | 133 | 243 | 17.0 |
| LAWYERS AND JUDGES . . . . . | 0 | 0 | 0 | 0 | 11 | 2 | 0 | 9 | 18+ |
| OTHER PROFESSIONAL SPECIALTY . . . | 73 | 20 | 38 | 16 | 261 | 99 | 33 | 129 | 16.4 |
| TECHNICAL, SALES, & ADMIN. SUPPORT . | 1123 | 449 | 524 | 150 | 459 | 353 | 42 | 64 | 12.7 |
| TECHNICIANS AND RELATED SUPPORT . . | 104 | 45 | 41 | 18 | 44 | 27 | 5 | 11 | 13.2 |
| HEALTH TECHNOLOGISTS & TECHNICIANS | 86 | 42 | 31 | 14 | 25 | 19 | 3 | 4 | 13.3 |
| ENGINEERING & SCIENCE TECHNICIANS. | 3 | 0 | 2 | 1 | 1 | 0 | 0 | 1 | 12.2 |
| TECH., EXC. HEALTH, ENGIN. & SCI . | 15 | 3 | 9 | 3 | 17 | 9 | 3 | 6 | 14.5 |
| SALES OCCUPATIONS . . . . . | 238 | 83 | 117 | 39 | 111 | 84 | 11 | 16 | 12.6 |
| SUPERVISORS AND PROPRIETORS. . . . | 49 | 11 | 31 | 8 | 27 | 23 | 2 | 2 | 12.6 |
| SALES REPRES., FINANCE & BUS. SERV | 73 | 20 | 37 | 9 | 48 | 29 | 9 | 10 | 13.3 |
| SALES REP., COMMODIT., EXC. RETAIL | 8 | 5 | 1 | 2 | 6 | 6 | 0 | 0 | 12.7 |
| SALES WORKERS, RETAIL & PERSONAL . | 104 | 38 | 47 | 19 | 30 | 26 | 0 | 3 | 12.5 |
| SALES RELATED OCCUPATIONS. . . . . | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 12.7 |
| ADMIN. SUPPORT, INCLUDING CLERICAL. | 781 | 322 | 366 | 94 | 305 | 242 | 26 | 37 | 12.7 |
| SUPERVISORS. . . . . | 24 | 12 | 9 | 3 | 10 | 6 | 0 | 4 | 12.7 |
| COMPUTER EQUIPMENT OPERATORS . . . | 19 | 9 | 8 | 2 | 11 | 9 | 0 | 2 | 12.7 |
| SECRETARIES, STENOGRAPH., & TYPIST | 301 | 117 | 162 | 22 | 103 | 82 | 12 | 9 | 12.7 |
| FINANCIAL RECORDS PROCESSING . . . | 130 | 52 | 52 | 27 | 70 | 56 | 5 | 9 | 12.7 |
| MAIL AND MESSAGE DISTRIBUTING. . . | 6 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 12.4 |
| OTHER ADMINISTRATIVE SUPPORT . . . | 302 | 130 | 132 | 40 | 111 | 87 | 10 | 13 | 12.7 |

**MEN**

| | ----- 1 TO 3 YEARS OF COLLEGE ---- | | | | --- 4 YEARS OF COLLEGE OR MORE --- | | | | MEDIAN SCHOOL YEARS |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | 1 YEAR | 2 YEARS | 3 YEARS | TOTAL | 4 YEARS | 5 YEARS | 6 YEARS OR MORE | COMPLETED |
| TOTAL. . . . . | 2487 | 802 | 1289 | 395 | 4165 | 1939 | 418 | 1809 | 12.7 |
| MANAGERIAL & PROFESSIONAL SPECIALTY. | 817 | 195 | 449 | 173 | 3069 | 1216 | 289 | 1565 | 16.4 |
| EXECUTIVE, ADMINISTR., & MANAGERIAL | 596 | 132 | 340 | 124 | 1359 | 773 | 117 | 469 | 15.3 |
| OFFICIALS & ADMINISTRATORS, PUBLIC | 29 | 8 | 15 | 6 | 71 | 44 | 2 | 24 | 15.0 |
| OTHER EXECUTIVE, ADMIN. & MANAGER. | 465 | 95 | 273 | 98 | 935 | 503 | 81 | 351 | 14.8 |
| MANAGEMENT RELATED OCCUPATIONS . . | 102 | 28 | 53 | 21 | 353 | 226 | 34 | 94 | 16.3 |
| PROFESSIONAL SPECIALTY OCCUPATIONS. | 221 | 64 | 108 | 49 | 1710 | 443 | 172 | 1096 | 18+ |
| ENGINEERS. . . . . | 66 | 18 | 31 | 17 | 355 | 210 | 41 | 104 | 16.4 |
| MATHEMATICAL & COMPUTER SCIENTISTS | 16 | 10 | 6 | 1 | 67 | 37 | 4 | 27 | 16.5 |
| NATURAL SCIENTISTS . . . . . | 10 | 4 | 5 | 1 | 56 | 19 | 3 | 34 | 17.0 |
| HEALTH DIAGNOSING OCCUPATIONS. . . | 0 | 0 | 0 | 0 | 225 | 7 | 5 | 213 | 18+ |
| HEALTH ASSESSMENT AND TREATING . . | 4 | 0 | 4 | 0 | 45 | 21 | 11 | 14 | 16.9 |
| TEACHERS, COLLEGE AND UNIVERSITY . | 7 | 0 | 7 | 0 | 199 | 8 | 12 | 179 | 18+ |
| TEACHERS, EXCEPT COLLEGE AND UNIV. | 21 | 10 | 5 | 6 | 249 | 34 | 35 | 180 | 18+ |
| LAWYERS AND JUDGES . . . . . | 0 | 0 | 0 | 0 | 149 | 3 | 0 | 145 | 18+ |
| OTHER PROFESSIONAL SPECIALTY . . . | 98 | 22 | 51 | 24 | 364 | 103 | 62 | 200 | 16.9 |
| TECHNICAL, SALES, & ADMIN. SUPPORT . | 775 | 265 | 378 | 132 | 744 | 490 | 94 | 161 | 13.0 |
| TECHNICIANS AND RELATED SUPPORT . . | 117 | 41 | 61 | 15 | 91 | 49 | 17 | 25 | 13.7 |
| HEALTH TECHNOLOGISTS & TECHNICIANS | 19 | 5 | 11 | 3 | 3 | 2 | 0 | 2 | 14.2 |
| ENGINEERING & SCIENCE TECHNICIANS. | 75 | 27 | 41 | 7 | 32 | 26 | 6 | 1 | 13.0 |
| TECH., EXC. HEALTH, ENGIN. & SCI . | 23 | 9 | 9 | 6 | 55 | 22 | 12 | 22 | 16.0 |
| SALES OCCUPATIONS . . . . . | 445 | 144 | 212 | 89 | 549 | 362 | 68 | 118 | 13.4 |
| SUPERVISORS AND PROPRIETORS. . . . | 105 | 61 | 87 | 37 | 150 | 107 | 17 | 27 | 12.9 |
| SALES REPRES., FINANCE & BUS. SERV | 105 | 37 | 45 | 23 | 202 | 109 | 26 | 67 | 15.1 |
| SALES REP., COMMODIT., EXC. RETAIL | 80 | 16 | 44 | 21 | 138 | 106 | 23 | 9 | 14.6 |
| SALES WORKERS, RETAIL & PERSONAL . | 75 | 32 | 36 | 8 | 58 | 41 | 3 | 15 | 12.8 |
| SALES RELATED OCCUPATIONS. . . . . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (B) |
| ADMIN. SUPPORT, INCLUDING CLERICAL. | 212 | 80 | 105 | 28 | 105 | 79 | 9 | 17 | 12.7 |
| SUPERVISORS. . . . . | 33 | 1 | 26 | 5 | 17 | 8 | 3 | 6 | 12.8 |
| COMPUTER EQUIPMENT OPERATORS . . . | 21 | 4 | 12 | 4 | 6 | 6 | 0 | 0 | 14.3 |
| SECRETARIES, STENOGRAPH., & TYPIST | 4 | 2 | 2 | 0 | 4 | 4 | 0 | 0 | 13.9 |
| FINANCIAL RECORDS PROCESSING . . . | 19 | 6 | 8 | 5 | 14 | 6 | 2 | 6 | 13.5 |
| MAIL AND MESSAGE DISTRIBUTING. . . | 33 | 12 | 18 | 3 | 5 | 5 | 0 | 0 | 12.6 |
| OTHER ADMINISTRATIVE SUPPORT . . . | 103 | 53 | 38 | 11 | 59 | 49 | 4 | 5 | 12.7 |

SOURCE: Bureau of Labor Statistics

## TABLE 4-6

LABOR FORCE STATUS OF PERSONS 20 TO 64 YEARS OLD BY YEARS OF HIGHER EDUCATION COMPLETED, SEX AND ETHNICITY, MARCH 1987

(Numbers in thousands)

| LABOR FORCE - STATUS AND YEARS OF HIGHER EDUCATION COMPLETED | TOTAL | | | | WHITE | | | | BLACK | | | | HISPANIC | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | %W | TOTAL | % WH | MEN | WOMEN | TOTAL | % BL | MEN | WOMEN | TOTAL | % HIS | MEN | WOMEN |
| Civilian Population | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 30,414 | 15,139 | 15,275 | 50.2 | 25,785 | 84.8 | 12,977 | 12,808 | 3,011 | 11.7 | 1,335 | 1,676 | 1,618 | 6.3 | 827 | 791 |
| 4 Years or More | 28,033 | 15,600 | 12,433 | 44.4 | 25,511 | 91.0 | 14,353 | 11,158 | 1,668 | 6.5 | 773 | 895 | 854 | 3.3 | 474 | 380 |
| Civilian Labor Force | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 23,352 | 12,204 | 11,148 | 47.7 | 19,637 | 84.1 | 10,388 | 9,249 | 2,396 | 12.2 | 1,093 | 1,303 | 1,319 | 6.7 | 723 | 596 |
| 4 Years or More | 24,732 | 14,657 | 10,075 | 40.7 | 22,473 | 90.9 | 13,508 | 8,965 | 1,507 | 6.7 | 701 | 806 | 752 | 3.3 | 448 | 304 |
| Labor Force Participation Rate | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 76.8 | 80.6 | 73.0 | | 76.2 | | 80.0 | 72.2 | 79.6 | | 81.9 | 77.7 | | | | |
| 4 Years or More | 88.2 | 94.0 | 81.0 | | 88.1 | | 94.1 | 80.3 | 90.3 | | 90.7 | 90.1 | | | | |
| Employed | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 22,132 | 11,523 | 10,609 | 47.9 | 18,772 | 84.8 | 9,878 | 8,894 | 2,129 | 11.3 | 974 | 1,155 | 1,231 | 6.6 | 671 | 560 |
| 4 Years or More | 24,103 | 14,268 | 9,835 | 40.8 | 21,945 | 91.0 | 13,173 | 8,772 | 1,426 | 6.5 | 662 | 764 | 732 | 3.3 | 433 | 299 |
| Unemployed | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 1,220 | 681 | 539 | 44.2 | 865 | 70.9 | 510 | 355 | 267 | 30.9 | 119 | 148 | 88 | 10.2 | 52 | 36 |
| 4 Years or More | 629 | 389 | 240 | 38.2 | 528 | 83.9 | 335 | 193 | 81 | 1[illegible] | 39 | 42 | 20 | 3.8 | 15 | 5 |
| Unemployment Rate | | | | | | | | | | | | | | | | |
| College: 1-3 Years | 5.2 | 5.6 | 4.8 | | 4.4 | | 4.9 | 3.8 | 11.1 | | 10.9 | 11.4 | | | | |
| 4 Years or More | 2.5 | 2.7 | 2.4 | | 2.3 | | 2.5 | 2.2 | 5.4 | | 5.6 | 5.2 | | | | |

SOURCE: Employment and Earnings, January 1987 Bureau of Labor Statistics

## TABLE 4-7

EMPLOYED PERSONS BY DETAILED OCCUPATION, SEX AND RACE, 1986

(Numbers in thousands)

| Occupation | Total Employed | Percent of Total | | | Occupation | Total Employed | Percent of Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Woman | Black | Hispanic Origin | | | Woman | Black | Hispanic Origin |
| **Total, 16 years and over** | 109,597 | **44.4** | **9.9** | **6.6** | **Professional specialty continued** | | | | |
| | | | | | Health diagnosing occupations | 728 | 15.0 | 3.3 | 3.2 |
| **Managerial & Professional Specialty** | 26,554 | **43.4** | **6.0** | **3.5** | Physicians | 489 | 17.6 | 3.3 | 4.1 |
| Executive, administrative and managerial | 12,642 | 36.8 | 5.2 | 3.7 | Dentists | 132 | 4.4 | 5.5 | 2.0 |
| Officials ,adminis., publ. admin. | 467 | 42.0 | 8.4 | 3.8 | Health assessment & treating occup. | 2,026 | 85.3 | 7.0 | 2.8 |
| Financial managers | 409 | 38.4 | 3.0 | 4.3 | Registered nurses | 1,488 | 94.3 | 6.7 | 2.4 |
| Personnel and labor relations mgrs. | 114 | 48.8 | 5.5 | 3.5 | Pharmacists | 162 | 31.4 | 4.0 | 3.7 |
| Purchasing managers | 100 | 29.4 | 4.1 | 3.0 | Dietitians | 73 | 93.4 | 17.7 | 2.5 |
| Mgrs., market., advertis. & publ. rel. | 440 | 24.9 | 2.5 | 2.3 | Therapists | 257 | 74.2 | 7.8 | 4.4 |
| Administrators, educ. & rel. fields | 500 | 47.7 | 8.9 | 3.5 | Inhalation | 73 | 59.9 | 13.8 | 7.5 |
| Mgrs., medicine & health | 127 | 62.2 | 8.1 | 2.7 | Physical | 56 | 71.8 | 4.1 | 5.3 |
| Mgrs, properties & real estate | 362 | 44.2 | 5.2 | 5.6 | Speech | 61 | 95.8 | 3.9 | 1.0 |
| Management-related occupations | 3,449 | 46.3 | 6.7 | 3.9 | Teachers, college & university | 639 | 36.0 | 4.0 | 3.2 |
| Accountants & auditors | 1,257 | 44.9 | 5.6 | 4.0 | Teachers, exc. college & university | 3,559 | 73.4 | 9.5 | 3.6 |
| Underwriters & other financial officers | 695 | 47.3 | 6.0 | 3.1 | Prek/kindergarten & kindergarten | 359 | 98.3 | 13.9 | 6.1 |
| Management analysts | 190 | 30.9 | 5.9 | 2.4 | Elementary school | 1,340 | 85.2 | 10.8 | 3.4 |
| Personnel, training & labor rel. spec. | 348 | 55.2 | 11.9 | 3.8 | Secondary school | 1,195 | 54.9 | 7.8 | 3.4 |
| Buyers, wholesale & retail, exc. farm prod. | 224 | 50.2 | 3.2 | 4.9 | Special education | 216 | 81.1 | 11.9 | 1.6 |
| Construction inspectors | 51 | 5.0 | 4.5 | 5.3 | Teachers, n.e.c. | 448 | 61.2 | 5.7 | 3.7 |
| Inspectors & compliance off., exc. constr. | 190 | 20.5 | 13.6 | 3.9 | Counselors, educational & vocational | 173 | 53.9 | 12.9 | 4.7 |
| | | | | | Librarians, archivists & curators | 212 | 82.9 | 7.4 | 1.8 |
| **Professional specialty** | 13,911 | **49.4** | **6.7** | **3.3** | Librarians | 194 | 85.9 | 7.5 | 1.7 |
| Architects | 132 | 9.7 | 3.2 | 4.1 | Social scientists & urban planners | 312 | 46.0 | 5.5 | 2.8 |
| Engineers | 1,749 | 6.0 | 3.7 | 2.5 | Economists | 111 | 39.3 | 3.0 | 2.8 |
| Aerospace | 93 | 7.1 | 4.0 | 3.5 | Psychologists | 169 | 52.5 | 6.8 | 3.1 |
| Chemical | 59 | 8.1 | .7 | 2.5 | Social, recreation & religious workers | 911 | 46.9 | 12.5 | 5.3 |
| Civil | 233 | 2.7 | 4.3 | 4.0 | Social workers | 480 | 69.0 | 17.8 | 7.3 |
| Electrical & electronic | 550 | 6.9 | 4.2 | 2.1 | Recreation workers | 79 | 68.3 | 15.6 | 5.2 |
| Industrial | 203 | 10.9 | 4.1 | 2.8 | Clergy | 285 | 7.2 | 5.5 | 2.4 |
| Mechanical | 287 | 3.5 | 3.6 | 1.0 | Religious workers, n.e.c. | 71 | 61.3 | 1.8 | 2.9 |
| Mathematical & computer scientists | 631 | 36.2 | 7.2 | 2.5 | Lawyers and judges | 650 | 18.1 | 3.0 | 1.9 |
| Computer systems analysts & scientists | 385 | 34.4 | 6.6 | 2.4 | Lawyers | 618 | 18.0 | 2.9 | 1.8 |
| Operations & sys. researchers & analysts | 195 | 39.4 | 7.6 | 3.2 | Writers, artists, entertainers & athletes | 1,781 | 45.0 | 5.2 | 4.0 |
| Natural scientists | 384 | 22.5 | 2.5 | 3.2 | Authors | 75 | 53.1 | .7 | 2.4 |
| Chemists, exc. biochemists | 123 | 22.8 | 3.6 | 3.0 | Technical writers | 45 | 38.4 | 7.0 | 1.0 |
| Geologists & geodesists | 49 | 14.0 | 1.2 | 1.6 | Designers | 484 | 49.7 | 3.8 | 4.9 |
| Biological & life scientists | 65 | 37.6 | 1.4 | 6.2 | Musicians and composers | 164 | 32.0 | 8.3 | 3.0 |
| | | | | | Actors and directors | 86 | 38.9 | 5.5 | 1.3 |

SOURCE: Employment and Earnings, January 1987 Bureau of Labor Statistics

## TABLE 4-7 (continued)

EMPLOYED PERSONS BY DETAILED OCCUPATION, SEX AND RACE, 1986

(Numbers in thousands)

| Occupation | Total Employed | Percent of Total | | |
|---|---|---|---|---|
| | | Woman | Black | Hispanic Origin |
| **Professional specialty continued** | | | | |
| Writers, artists, entertainers & athletes, cont. | | | | |
| Painters, sculptors, craft-artists | 189 | 51.0 | 6.3 | 3.3 |
| Photographers | 127 | 31.9 | 5.7 | 3.5 |
| Editors and reporters | 251 | 50.5 | 3.8 | 4.4 |
| Public relations specialists | 157 | 51.7 | 6.9 | 3.1 |
| Announcers | 55 | 20.0 | 8.3 | 3.2 |
| Athletes | 64 | 21.7 | 7.1 | 6.4 |
| **Technical, sales & admin. support** | **34,353** | **64.7** | **8.5** | **5.3** |
| Technicians and related support | 3,364 | 47.0 | 8.2 | 4.0 |
| Health technologists & technicians | 1,124 | 84.1 | 12.4 | 3.7 |
| Clinical lab technol. & technicians | 285 | 76.5 | 10.8 | 3.8 |
| Dental hygienists | 59 | 99.5 | .5 | 1.7 |
| Radiologic technicians | 113 | 67.1 | 9.0 | 5.6 |
| Licensed practical nurses | 417 | 97.5 | 17.2 | 2.9 |
| Engr., related technol. & technicians | 937 | 17.7 | 6.3 | 5.3 |
| Electrical & electronic technicians | 328 | 12.6 | 7.0 | 4.5 |
| Drafting occupations | 283 | 19.4 | 4.3 | 7.2 |
| Surveying and mapping technitians | 80 | 10.3 | 4.9 | 7.3 |
| Science technicians | 208 | 27.9 | 7.0 | 4.2 |
| Biological technicians | 55 | 35.5 | 5.3 | 3.9 |
| Chemical technicians | 78 | 23.7 | 5.6 | 5.1 |
| Technicians, exc. health, engr. & sci. | 1,093 | 37.6 | 5.8 | 3.1 |
| Airplane pilots & navigators | 79 | 1.5 | .9 | .1 |
| Computer programmers | 549 | 34.0 | 5.9 | 2.2 |
| Legal assistants | 176 | 77.5 | 5.6 | 5.0 |
| **Sales occupations** | **13,245** | **48.2** | **5.7** | **4.9** |
| Supervisors and proprietors | 3,493 | 30.5 | 4.0 | 4.4 |
| Sales reps, finance, business and services | 2,255 | 41.5 | 3.9 | 3.4 |
| Insurance sales | 562 | 28.7 | 5.8 | 3.9 |
| Real estate sales | 737 | 50.6 | 2.1 | 3.3 |
| Securities and financial services sales | 283 | 24.5 | 3.1 | 2.6 |
| Advertising and related sales | 139 | 50.4 | 6.4 | 3.8 |
| Sales occupations, other business serv. | 534 | 49.0 | 4.0 | 3.5 |
| Sales reps, commodities, exc. retail | 1,505 | 18.3 | 2.2 | 3.4 |
| Sales workers, retail and personal services. | 5,927 | 68.6 | 8.2 | 6.1 |

| Occupation | Total Employed | Percent of Total | | |
|---|---|---|---|---|
| | | Woman | Black | Hispanic Origin |
| **Administrative support, incl. clerical** | **17,745** | **80.4** | **10.7** | **5.8** |
| Supervisors | 727 | 59.3 | 10.8 | 5.1 |
| General office | 437 | 68.1 | 10.6 | 5.5 |
| Financial records processing | 94 | 73.3 | 4.9 | 3.1 |
| Supervisors, distr., sched. and adj. clerks | 152 | 30.9 | 14.9 | 5.9 |
| Computer equipment operators | 859 | 68.5 | 14.0 | 6.1 |
| Computer operators | 853 | 68.6 | 14.0 | 6.0 |
| Secretaries, stenog. and typists | 4,940 | 98.2 | 8.5 | 5.1 |
| Secretaries | 4,023 | 99.0 | 6.9 | 4.8 |
| Stenographers | 47 | 89.8 | 6.8 | .2 |
| Typists | 870 | 95.2 | 16.3 | 6.5 |
| Information clerks | 1,326 | 89.7 | 8.4 | 6.7 |
| Records processing occupations exc. financial | 845 | 81.4 | 14.4 | 7.0 |
| Financial records processing | 2,473 | 90.8 | 5.4 | 4.1 |
| Bookkeepers, accounting & auditing clerks | 2,007 | 91.8 | 4.1 | 3.8 |
| Communications equipment operators | 230 | 87.4 | 17.5 | 5.5 |
| Mail & message distr. occupations | 903 | 34.4 | 20.3 | 6.2 |
| Postal clerks, exc. mail carriers | 299 | 43.5 | 29.8 | 7.1 |
| Mail carriers, postal service | 297 | 20.6 | 12.9 | 4.5 |
| Mail clerks, exc. postal service | 168 | 48.9 | 18.4 | 6.8 |
| Messengers | 139 | 26.8 | 17.8 | 7.3 |
| Material recording, sched. & distr. clerks | 1,639 | 39.5 | 11.8 | 8.1 |
| Dispatchers | 187 | 50.7 | 7.7 | 3.7 |
| Production coordinators | 178 | 45.2 | 7.2 | 4.4 |
| Traffic, shipping & receiving clerks | 468 | 26.1 | 11.7 | 12.4 |
| Stock & inventory clerks | 553 | 39.9 | 14.2 | 7.2 |
| Expediters | 109 | 61.9 | 10.4 | 6.2 |
| Adjusters & investigators | 824 | 72.3 | 11.1 | 5.7 |
| Insurance adjust., examin. & investigators | 250 | 66.6 | 12.5 | 4.8 |
| Investigators & adjusters, exc. insur. | 382 | 74.4 | 9.9 | 5.0 |
| Eligibility clerks, social welfare | 70 | 90.4 | 18.1 | 7.9 |
| Bill & account collectors | 122 | 67.2 | 7.3 | 8.1 |
| Miscellaneous administrative support | 2,902 | 84.9 | 13.4 | 6.5 |
| General office clerks | 740 | 80.5 | 13.0 | 6.1 |
| Bank tellers | 482 | 91.8 | 7.8 | 5.3 |
| Data entry keyers | 343 | 91.1 | 19.6 | 8.1 |
| Teachers' aides | 381 | 94.2 | 17.9 | 10.8 |

SOURCE: Employment and Earnings, January 1987 Bureau of Labor Statistics

## TABLE 4-7 (continued)

EMPLOYED PERSONS BY DETAILED OCCUPATION, SEX AND RACE, 1986

(Numbers in thousands)

| Occupation | Total Employed | Percent of Total | | | Occupation | Total Employed | Percent of Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Woman | Black | Hispanic Origin | | | Woman | Black | Hispanic Origin |
| **Service occupations** | 14,680 | 60.7 | 16.9 | 8.8 | **Precision production, craft & repair** | 13,405 | 8.6 | 7.5 | 7.7 |
| Private household | 981 | 96.0 | 23.9 | 12.9 | Mechanics, repairers | 4,374 | 3.5 | 7.3 | 6.9 |
| Child care workers | 400 | 97.4 | 8.3 | 6.1 | Supervisors | 247 | 8.1 | 5.0 | 4.3 |
| Cleaners & servants | 527 | 95.3 | 35.5 | 17.8 | Mechanics and repairers exc. supervisors | 4,127 | 3.2 | 7.4 | 7.1 |
| Protective services | 1,787 | 12.4 | 15.0 | 5.6 | Vehicle & mobile equip. mechs. & repairers | 1,787 | 1.0 | 6.7 | 7.6 |
| Supervisors, protective service | 162 | 4.3 | 8.7 | 4.4 | Automobile mechanics | 871 | 1.0 | 7.6 | 8.4 |
| Firefighting & fire prevention | 218 | 2.2 | 7.3 | 4.5 | Bus, truck & stationary engine mechs. | 337 | 0.7 | 6.3 | 6.2 |
| Police & detectives | 666 | 10.9 | 14.6 | 5.2 | Aircraft engine mechanics | 99 | 2.3 | 11.1 | 5.5 |
| Police & detectives, public service | 402 | 7.0 | 11.7 | 6.3 | Automobile body and related repairers | 196 | 1.4 | 3.3 | 11.6 |
| Sheriffs, bailiffs & other law enfor. officers | 89 | 13.5 | 12.4 | 6.1 | Heavy equipment mechanics | 164 | 0.6 | 6.8 | 4.9 |
| Correctional institution officers | 174 | 18.7 | 22.4 | 2.3 | Industrial machinery repairers | 541 | 2.6 | 7.6 | 7.4 |
| Guards | 741 | 18.4 | 19.0 | 6.4 | Electrical & electronic equip. repairers | 710 | 9.0 | 7.9 | 6.0 |
| | | | | | Electronic rep., commun. & indus. equipment | 166 | 5.9 | 5.9 | 7.9 |
| **Service occupations, except private household and protective service** | 11,913 | 65.0 | 16.6 | 9.0 | Data processing equipment repairers | 133 | 11.1 | 9.6 | 3.0 |
| | | | | | Telephone installers and repairers | 228 | 13.3 | 8.1 | 6.0 |
| Food preparation & service occupations | 5,127 | 62.8 | 12.1 | 8.8 | Heating, air cond. and refrig. mechanics | 261 | 0.3 | 6.1 | 7.5 |
| Supervisors | 293 | 70.1 | 9.9 | 7.4 | Miscellaneous mechanics and repairers | 791 | 4.1 | 8.2 | 6.4 |
| Bartenders | 322 | 48.8 | 3.1 | 5.2 | | | | | |
| Waiters & waitresses | 1,403 | 85.1 | 5.1 | 6.2 | **Construction trades** | 4,924 | 2.0 | 7.1 | 7.4 |
| Cooks, except short order | 1,563 | 50.6 | 17.2 | 9.6 | Supervisors | 615 | 1.6 | 3.8 | 4.2 |
| Short-order cooks | 111 | 36.8 | 22.6 | 6.1 | Construction trades exc. supervisors | 4,309 | 2.1 | 7.6 | 7.9 |
| Food counter, fountain and related occup. | 340 | 78.5 | 12.6 | 5.3 | Brickmasons and stonemasons | 177 | 0.2 | 15.3 | 7.3 |
| Health service occupations | 1,823 | 89.9 | 25.1 | 5.7 | Carpet installers | 104 | 0.9 | 8.4 | 6.4 |
| Dental assistants | 167 | 99.0 | 4.2 | 7.1 | Carpenters | 1,327 | 1.4 | 5.3 | 6.7 |
| Health aides, except nursing | 357 | 83.4 | 18.8 | 7.8 | Drywall installers | 158 | 2.4 | 5.4 | 13.2 |
| Nursing aides, orderlies and attendants | 1,299 | 90.5 | 29.5 | 5.0 | Electricians | 635 | 1.3 | 6.2 | 4.6 |
| Cleaning & building service occupations | 2,861 | 41.5 | 23.8 | 12.8 | Electrical power installers and repairers | 108 | 1.4 | 7.1 | 2.3 |
| Supervisors | 146 | 33.4 | 18.6 | 9.7 | Painters, construction and maintenance | 521 | 6.1 | 9.2 | 10.0 |
| Maids and housemen | 583 | 84.8 | 29.8 | 13.9 | Plumbers, pipefitters and steamfitters | 473 | 0.7 | 7.2 | 6.9 |
| Janitors and cleaners | 2,075 | 30.9 | 22.9 | 12.7 | Concrete and terrazzo finishers | 87 | 0.9 | 31.3 | 19.5 |
| Personal service occupations | 2,101 | 80.8 | 10.3 | 7.2 | Roofers | 187 | 1.4 | 9.5 | 13.5 |
| Barbers | 92 | 16.6 | 9.6 | 7.2 | Structural metal workers | 68 | 0.5 | 6.6 | 5.2 |
| Hairdressers and cosmetologists | 719 | 88.8 | 7.3 | 7.3 | Extractive occupations | 171 | 2.4 | 3.7 | 11.0 |
| Attendants, amusement and recreation facil. | 121 | 43.1 | 8.3 | 3.8 | Precision production occupations | 3,936 | 22.8 | 8.5 | 8.8 |
| Public transportation attendants | 71 | 77.1 | 7.3 | 6.2 | Supervisors | 1,314 | 15.0 | 7.9 | 7.5 |
| Welfare service aides | 87 | 91.7 | 22.5 | 12.9 | Precision metalworking | 924 | 5.9 | 5.6 | 7.0 |
| Child care workers | 762 | 96.5 | 11.4 | 6.9 | Tool and die makers | 154 | 1.6 | 2.3 | 3.2 |
| | | | | | Machinists | 488 | 3.7 | 5.7 | 8.0 |

SOURCE: Employment and Earnings, January 1987 Bureau of Labor Statistics

## TABLE 4-7 (continued)

EMPLOYED PERSONS BY DETAILED OCCUPATION, SEX AND RACE, 1986

(Numbers in thousands)

| Occupation | Total Employed | Percent of Total | | |
|---|---|---|---|---|
| | | Woman | Black | Hispanic Origin |
| **Construction Trades continued** | | | | |
| Sheet-metal workers | 137 | 6.2 | 7.1 | 6.3 |
| Precision woodworking occupations | 103 | 17.1 | 3.7 | 8.5 |
| Precision textile, apparel,and furnishings machine workers | 273 | 57.5 | 8.2 | 13.6 |
| Dressmakers | 117 | 94.9 | 7.8 | 13.1 |
| Upholsterers | 79 | 24.6 | 8.6 | 11.2 |
| Precision workers, assorted materials | 535 | 57.3 | 11.1 | 10.8 |
| Optical goods workers | 58 | 55.9 | 3.5 | 1.8 |
| Dental lab. & medical appl. technicians | 55 | 39.4 | 8.7 | 5.9 |
| Electrical & electronic equip. assemblers | 325 | 68.7 | 12.8 | 13.4 |
| Precision food prod. occupations | 435 | 29.4 | 14.4 | 12.8 |
| Butchers and meat cutters | 285 | 21.5 | 16.1 | 10.8 |
| Bakers | 110 | 39.0 | 13.4 | 13.3 |
| Precision inspectors, testers & rel. workers | 115 | 21.5 | 8.9 | 9.2 |
| Plant and system operators | 236 | 4.7 | 9.3 | 4.8 |
| Stationary engineers | 110 | 2.5 | 10.6 | 3.5 |
| **Operators, fabricators and laborers** | **17,106** | **25.4** | **15.1** | **10.5** |
| Machine operators, assemblers & inspectors | 7,911 | 40.3 | 14.7 | 12.1 |
| Machine oper. & tenders, except precision | 5,246 | 41.6 | 15.6 | 12.9 |
| Metalworking & plastic working mach. operators | 485 | 18.4 | 11.7 | 9.2 |
| Metal & plastic processing machine oper. | 162 | 21.8 | 9.3 | 9.8 |
| Molding & casing machine operators | 94 | 29.8 | 7.9 | 10.5 |
| Woodworking machine operators | 146 | 16.7 | 14.9 | 6.2 |
| Printing machine operators | 463 | 28.4 | 6.3 | 6.9 |
| Textile, apparel & furnishings mach. oper. | 1,323 | 79.8 | 21.4 | 15.9 |
| Machine operators, assorted materials | 2,639 | 31.7 | 15.6 | 13.8 |
| Fabricators, assemblers, hand workers | 1,349 | 32.4 | 12.7 | 10.8 |
| Production inspectors, checkers & examiners | 858 | 51.0 | 12.7 | 8.1 |
| **Transportation and material moving occupations** | **4,564** | **8.9** | **14.0** | **7.5** |
| Motor vehicle operators | 3,380 | 10.8 | 14.8 | 7.4 |
| Truck drivers, heavy | 1,305 | 2.1 | 13.8 | 7.0 |
| Truck drivers, light | 647 | 10.3 | 12.1 | 9.5 |
| **Transportation and material moving, continued** | | | | |
| Transportation occup. except motor vehicles | 203 | 2.1 | 3.9 | 4.3 |
| Drivers-sales workers | 215 | 7.5 | 5.8 | 4.2 |
| Bus drivers | 415 | 50.4 | 24.0 | 5.4 |
| Taxi-cab drivers and chauffeurs | 187 | 12.5 | 121.9 | 11.6 |
| Rail transportation occupations | 143 | 2.1 | 5.0 | 4.8 |
| Water transportation occupations | 59 | 2.1 | 1.1 | 3.2 |
| Material moving equip. operators | 981 | 3.6 | 13.6 | 8.7 |
| Operating engineers | 160 | 1.0 | 7.7 | 5.8 |
| Crane and tower operators | 85 | .8 | 17.6 | 6.7 |
| Excavating and loading machine operators | 101 | .5 | 6.1 | 5.8 |
| Grader, dozer and scraper operators | 105 | 1.9 | 7.6 | 5.1 |
| Industrial truck & tractor equipment oper. | 386 | 5.0 | 19.4 | 11.1 |
| **Handlers, equip. cleaners, helpers and laborers** | **4,685** | **16.3** | **16.6** | **10.5** |
| Freight, stock and material handlers | 1,713 | 15.8 | 17.0 | 8.2 |
| Stock handlers and baggers | 878 | 21.0 | 11.8 | 7.4 |
| Garage, service station related occupations | 286 | 5.8 | 10.3 | 8.6 |
| Vehicle washers and equipment cleaners | 213 | 14.8 | 20.8 | 12.8 |
| Hand packers and packagers | 302 | 64.1 | 16.8 | 12.0 |
| Laborers, except construction | 1,128 | 17.7 | 18.0 | 9.6 |
| **Farming, forestry and fishing** | **3,444** | **15.9** | **6.5** | **10.5** |
| Farm operators and managers | 1,337 | 14.1 | 1.4 | 1.1 |
| Farmers | 1,207 | 14.1 | 1.5 | 0.9 |
| Farm managers | 130 | 13.8 | 1.2 | 2.8 |
| Other agricultural and related occupations | 1,917 | 18.1 | 9.7 | 17.4 |
| Farm occupations, except managerial | 1,002 | 24.0 | 8.4 | 21.2 |
| Farm workers | 940 | 23.6 | 8.6 | 21.1 |
| Related agricultural occupations | 915 | 11.7 | 11.0 | 13.2 |
| Supervisors | 119 | 7.1 | 7.1 | 7.1 |
| Groundskeepers and gardeners, except farm | 704 | 5.2 | 12.1 | 14.7 |
| Animal caretakers, except farm | 75 | 65.9 | 5.0 | 4.6 |
| Forestry and logging occupations | 112 | 4.4 | 16.8 | 3.5 |
| Timber cutting and logging | 87 | 1.3 | 18.0 | 2.3 |

Note: N.e.c. is an abbreviation for "not elsewhere classified" and designates broad categories of occupations which cannot be more specifically identified.

SOURCE: Characteristics of Doctoral Scientists and Engineers, 1985, National Science Foundation

## TABLE 4-8

### DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE AND HISPANIC ORIGIN, 1985

| | | All Races | | White | | Black | | Am. Indian | | Asian | | Hispanic** | | Other/ no report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sex | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. |
| TOTAL ALL FIELDS | Total | 424,616 | 100 | 377,965 | 89.0 | 5,931 | 1.4 | 534 | 0.1 | 35,502 | 8.4 | 6,192 | 1.5 | 4,704 |
| | Women | 64,007 | 15.1 | 57,103 | 15.1 | 1,787 | 30.1 | 71 | 13.3 | 4,444 | 12.5 | 1,038 | 16.8 | 602 |
| PHYSICAL SCIENTISTS | Total | 73,074 | 100 | 65,006 | 89.0 | 524 | 0.7 | 69 | 0.1 | 6,729 | 9.2 | 952 | 1.3 | 746 |
| | Women | 5,273 | 7.2 | 4,361 | 6.7 | 49 | 9.4 | * | | 834 | 12.4 | 110 | 11.6 | 29 |
| Chemists | Total | 48,124 | 100 | 42,726 | 88.8 | 380 | 0.8 | 41 | 0.1 | 4,477 | 9.3 | 672 | 1.4 | 500 |
| | Women | 4,307 | 8.9 | 3,545 | 8.3 | 42 | 11.1 | * | | 703 | 15.7 | 97 | 14.4 | 17 |
| Physicists/ Astronomers | Total | 24,950 | 100 | 22,280 | 89.3 | 144 | 0.6 | 28 | 0.1 | 2,252 | 9.0 | 280 | 1.1 | 246 |
| | Women | 966 | 3.9 | 816 | 3.7 | 7 | 4.9 | * | | 131 | 5.8 | 13 | 4.6 | 12 |
| MATHEMATICAL SCIENTISTS | Total | 17,477 | 100 | 15,611 | 89.3 | 166 | 0.9 | 5 | 0.0 | 1,397 | 8.0 | 266 | 1.5 | 298 |
| | Women | 1,696 | 9.7 | 1,454 | 9.3 | 24 | 14.5 | * | | 207 | 14.8 | 38 | 14.3 | 11 |
| Mathema- ticians | Total | 14,604 | 100 | 13,152 | 90.1 | 146 | 1.0 | 2 | 0.0 | 1,058 | 7.2 | 255 | 1.7 | 246 |
| | Women | 1,358 | 9.3 | 1,177 | 8.9 | 20 | 13.7 | * | | 152 | 14.4 | 38 | 14.9 | 9 |
| Statis- ticians | Total | 2,873 | 100 | 2,459 | 85.6 | 20 | 0.7 | 3 | 0.1 | 339 | 11.8 | 11 | 0.4 | 52 |
| | Women | 338 | 11.8 | 277 | 11.3 | 4 | 20.0 | * | | 55 | 16.2 | * | | 2 |
| COMPUTER SCIENTISTS | Total | 14,985 | 100 | 13,082 | 87.3 | 85 | 0.6 | 10 | 0.1 | 1,637 | 10.9 | 226 | 1.5 | 171 |
| | Women | 1,634 | 10.9 | 1,437 | 11.0 | 10 | 11.8 | 2 | 20.0 | 181 | 11.1 | 7 | 3.1 | 4 |
| ENVIRON. SCIENTISTS | Total | 17,974 | 100 | 16,434 | 91.4 | 99 | 0.6 | 18 | 0.1 | 1,148 | 6.4 | 250 | 1.4 | 275 |
| | Women | 1,147 | 6.4 | 1,048 | 6.4 | 11 | 11.1 | * | | 83 | 7.2 | 18 | 7.2 | 5 |
| Earth Scientists | Total | 13,797 | 100 | 12,584 | 91.2 | 52 | 0.4 | 16 | 0.1 | 926 | 6.7 | 125 | 0.9 | 219 |
| | Women | 810 | 5.9 | 745 | 5.9 | 11 | 21.2 | * | | 49 | 5.3 | 4 | 3.2 | 5 |
| Ocean- ography | Total | 1,985 | 100 | 1,875 | 94.5 | 6 | 0.3 | * | | 82 | 4.1 | 74 | 3.7 | 22 |
| | Women | 253 | 12.7 | 248 | 13.2 | * | 0.0 | * | | 5 | 6.1 | 10 | 13.5 | * |
| Atmospheric Scientists | Total | 2,192 | 100 | 1,975 | 90.1 | 41 | 1.9 | 2 | 0.1 | 140 | 6.4 | 51 | 2.3 | 34 |
| | Women | 84 | 3.8 | 55 | 2.8 | * | 0.0 | * | | 29 | 20.7 | 4 | 7.8 | * |
| ENGINEERS | Total | 67,896 | 100 | 54,431 | 80.2 | 516 | 0.8 | 86 | 0.1 | 12,090 | 17.8 | 895 | 1.3 | 773 |
| | Women | 1,537 | 2.3 | 1,158 | 2.1 | 43 | 8.3 | 6 | 7.0 | 326 | 2.7 | 22 | 2.5 | 4 |
| LIFE SCIENTISTS | Total | 109,866 | 100 | 99,438 | 90.5 | 1,524 | 1.4 | 135 | 0.1 | 7,778 | 7.1 | 1,449 | 1.3 | 991 |
| | Women | 22,005 | 20.0 | 19,375 | 19.5 | 536 | 35.2 | 23 | 17.0 | 1,905 | 24.5 | 278 | 19.2 | 166 |
| Biological Scientists | Total | 65,084 | 100 | 58,785 | 90.3 | 790 | 1.2 | 67 | 0.1 | 4,849 | 7.5 | 809 | 1.2 | 593 |
| | Women | 14,369 | 22.1 | 12,543 | 21.3 | 290 | 36.7 | 14 | 20.9 | 1,410 | 29.1 | 168 | 20.8 | 112 |
| Agricultural Scientists | Total | 16,856 | 100 | 15,631 | 92.7 | 148 | 0.9 | 33 | 0.2 | 948 | 5.6 | 200 | 1.2 | 96 |
| | Women | 938 | 5.6 | 824 | 5.3 | 15 | 10.1 | 2 | 6.1 | 92 | 9.7 | 17 | 8.5 | 5 |
| Medical Scientists | Total | 27,926 | 100 | 25,022 | 89.6 | 586 | 2.1 | 35 | 0.1 | 1,981 | 7.1 | 440 | 1.6 | 302 |
| | Women | 6,698 | 24.0 | 6,008 | 24.0 | 231 | 39.4 | 7 | 20.0 | 403 | 20.3 | 93 | 21.1 | 49 |
| PSYCHOLO- GISTS | Total | 54,872 | 100 | 52,056 | 94.9 | 1,210 | 2.2 | 81 | 0.1 | 783 | 1.4 | 1,056 | 1.9 | 742 |
| | Women | 17,737 | 32.3 | 16,483 | 31.7 | 620 | 51.2 | 22 | 27.2 | 382 | 48.8 | 354 | 33.5 | 230 |
| SOCIAL SCIENTISTS | Total | 68,472 | 100 | 61,887 | 90.4 | 1,807 | 2.6 | 130 | 0.2 | 3,940 | 5.8 | 1,098 | 1.6 | 708 |
| | Women | 12,978 | 19.0 | 11,787 | 19.0 | 494 | 27.3 | 18 | 13.8 | 526 | 13.4 | 211 | 19.2 | 153 |
| Economists | Total | 19,068 | 100 | 16,887 | 88.6 | 354 | 1.9 | 58 | 0.3 | 1,583 | 8.3 | 384 | 2.0 | 186 |
| | Women | 1,862 | 9.8 | 1,676 | 9.9 | 47 | 13.3 | * | | 126 | 8.0 | 41 | 10.7 | 13 |
| Sociologists/ Anthropol. | Total | 13,944 | 100 | 12,915 | 92.6 | 371 | 2.7 | 41 | 0.3 | 523 | 3.8 | 215 | 1.5 | 94 |
| | Women | 4,136 | 29.7 | 3,826 | 29.6 | 142 | 38.3 | 4 | 9.8 | 120 | 22.9 | 57 | 26.5 | 44 |
| Other Social Scientists | Total | 35,460 | 100 | 32,085 | 90.5 | 1,082 | 3.1 | 31 | 0.1 | 1,834 | 5.2 | 499 | 1.4 | 428 |
| | Women | 6,980 | 19.7 | 6,285 | 19.6 | 305 | 28.2 | 14 | 45.2 | 280 | 15.3 | 113 | 22.6 | 96 |

* No cases reported. ** Included here and in other racial groups.

Note: Top percentage in each field is percent of total. Next percentage is percent of women in that field.

Source: Characteristics of Doctoral Scientists and Engineers 1985, National Science Foundation

## TABLE 4-9

## EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE AND SEX, 1985

| FIELD | SEX | YEARS OF PROFESSIONAL EXPERIENCE | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL+ | 1 or Less | | 2-4 Years | | 5-9 Years | | 10-14 Years | | 15-19 Years | | 20-24 Years | | 25-29 Year | | 30-34 Years | | 35-39 Years | | 40 or More | |
| | | No. | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| TOTAL | Total | 400358 | 10731 | 2.7 | 46797 | 11.7 | 70418 | 17.6 | 71376 | 17.8 | 58414 | 14.6 | 34413 | 8.6 | 20787 | 5.2 | 17279 | 4.3 | 5809 | 1.5 | 1805 | 0.5 |
| ALL FIELDS | Women | 58485 | 3426 | 5.9 | 12698 | 21.7 | 15314 | 26.2 | 9978 | 17.1 | 4470 | 7.6 | 2313 | 4.0 | 1110 | 1.9 | 755 | 1.3 | 198 | 0.3 | 102 | 0.2 |
| Chemists | Total | 43735 | 713 | 1.6 | 4,363 | 10.0 | 6,047 | 13.8 | 6,148 | 14.1 | 7,370 | 16.9 | 4,764 | 10.9 | 3540 | 8.1 | 2905 | 6.6 | 1149 | 2.6 | 491 | 1.1 |
| | Women | 3805 | 178 | 4.7 | 753 | 19.8 | 820 | 21.6 | 670 | 17.6 | 384 | 10.1 | 247 | 6.5 | 130 | 3.4 | 98 | 2.6 | 32 | 0.8 | 20 | 0.5 |
| Physicists/ Astronomers | Total | 23745 | 420 | 1.8 | 2,219 | 9.3 | 3,349 | 14.1 | 4,117 | 17.3 | 3,954 | 16.7 | 2,841 | 12.0 | 1423 | 6.0 | 1425 | 6.0 | 494 | 2.1 | 188 | 0.8 |
| | Women | 866 | 41 | 4.7 | 181 | 20.9 | 204 | 23.6 | 136 | 15.7 | 67 | 7.7 | 32 | 3.7 | 34 | 3.9 | 24 | 2.8 | 8 | 0.9 | 3 | 0.3 |
| Mathematicians | Total | 13957 | 219 | 1.6 | 1,164 | 8.3 | 2,008 | 14.4 | 2,171 | 15.6 | 2,757 | 19.8 | 1,513 | 10.8 | 709 | 5.1 | 559 | 4.0 | 296 | 2.1 | 80 | 0.6 |
| | Women | 1233 | 43 | 3.5 | 194 | 15.7 | 258 | 20.9 | 253 | 20.5 | 171 | 13.9 | 78 | 6.3 | 24 | 1.9 | 22 | 1.8 | 16 | 1.3 | 4 | 0.3 |
| Statisticians | Total | 2801 | 36 | 1.3 | 257 | 9.2 | 375 | 13.4 | 663 | 23.7 | 404 | 14.4 | 355 | 12.7 | 129 | 4.6 | 85 | 3.0 | 11 | 0.4 | 18 | 0.6 |
| | Women | 326 | 20 | 6.1 | 70 | 21.5 | 80 | 24.5 | 60 | 18.4 | 18 | 5.5 | 18 | 5.5 | 9 | 2.8 | * | | 2 | 0.6 | * | |
| Computer/Info. Specialists | Total | 14964 | 471 | 3.1 | 1,938 | 13.0 | 2,902 | 19.4 | 3,363 | 22.5 | 2,028 | 13.6 | 1,052 | 7.0 | 304 | 2.0 | 301 | 2.0 | 66 | 0.4 | 11 | 0.1 |
| | Women | 1619 | 81 | 5.0 | 339 | 20.9 | 441 | 27.2 | 343 | 21.2 | 84 | 5.2 | 17 | 1.1 | 19 | 1.2 | 8 | 0.5 | * | | 2 | 0.1 |
| Environmental Scientists | Total | 17288 | 507 | 2.9 | 1,758 | 10.2 | 3,112 | 18.0 | 3,403 | 19.7 | 2,569 | 14.9 | 1,520 | 8.8 | 890 | 5.1 | 637 | 3.7 | 386 | 2.2 | 70 | 0.4 |
| | Women | 1089 | 88 | 8.1 | 286 | 26.3 | 290 | 26.6 | 169 | 15.5 | 74 | 6.8 | 32 | 2.9 | 24 | 2.2 | 14 | 1.3 | 4 | 0.4 | 2 | 0.2 |
| Biological Scientists | Total | 59871 | 1695 | 2.8 | 8,126 | 13.6 | 10,821 | 18.1 | 10,523 | 17.6 | 7,858 | 13.1 | 4,852 | 8.1 | 3252 | 5.4 | 2572 | 4.3 | 778 | 1.3 | 252 | 0.4 |
| | Women | 12637 | 611 | 4.8 | 2,718 | 21.5 | 3,084 | 24.4 | 2,330 | 18.4 | 1,021 | 8.1 | 620 | 4.9 | 276 | 2.2 | 212 | 1.7 | 23 | 0.2 | 31 | 0.2 |
| Agricultural Scientists | Total | 15513 | 532 | 3.4 | 1,563 | 10.1 | 2,330 | 15.0 | 2,749 | 17.7 | 2,047 | 13.2 | 1,551 | 10.0 | 1089 | 7.0 | 1107 | 7.1 | 292 | 1.9 | 52 | 0.3 |
| | Women | 829 | 113 | 13.6 | 252 | 30.4 | 211 | 25.5 | 64 | 7.7 | 26 | 3.1 | 17 | 2.1 | 6 | 0.7 | 16 | 1.9 | * | | * | |
| Medical Scientists | Total | 26454 | 899 | 3.4 | 3,558 | 13.4 | 5,167 | 19.5 | 4,907 | 18.5 | 3,242 | 12.3 | 1,875 | 7.1 | 1315 | 5.0 | 857 | 3.2 | 260 | 1.0 | 155 | 0.6 |
| | Women | 6226 | 387 | 6.2 | 1,455 | 23.4 | 1,700 | 27.3 | 1,007 | 16.2 | 404 | 6.5 | 192 | 3.1 | 75 | 1.2 | 37 | 0.6 | 39 | 0.6 | 12 | 0.2 |
| Psychologists | Total | 52182 | 1783 | 3.4 | 7,754 | 14.9 | 10,876 | 20.8 | 8,269 | 15.8 | 6,103 | 11.7 | 3,383 | 6.5 | 2629 | 5.0 | 2074 | 4.0 | 342 | 0.7 | 81 | 0.2 |
| | Women | 16609 | 949 | 5.7 | 3,686 | 22.2 | 4,629 | 27.9 | 2,470 | 14.9 | 1,260 | 7.6 | 658 | 4.0 | 307 | 1.8 | 190 | 1.1 | 26 | 0.2 | 20 | 0.1 |
| Economists | Total | 17925 | 444 | 2.5 | 1,981 | 11.1 | 3,122 | 17.4 | 3,718 | 20.7 | 2,643 | 14.7 | 1,679 | 9.4 | 901 | 5.0 | 698 | 3.9 | 279 | 1.6 | 26 | 0.1 |
| | Women | 1709 | 103 | 6.0 | 248 | 14.5 | 463 | 27.1 | 346 | 20.2 | 159 | 9.3 | 86 | 5.0 | 15 | 0.9 | 42 | 2.5 | 7 | 0.4 | 8 | 0.5 |
| Sociologists/ Anthropologists | Total | 12692 | 478 | 3.8 | 1,535 | 12.1 | 2,538 | 20.0 | 2,661 | 21.0 | 1,483 | 11.7 | 1,005 | 7.9 | 594 | 4.7 | 394 | 3.1 | 112 | 0.9 | 41 | 0.3 |
| | Women | 3625 | 259 | 7.1 | 746 | 20.6 | 829 | 22.9 | 756 | 20.9 | 313 | 8.6 | 130 | 3.6 | 69 | 1.9 | 48 | 1.3 | 22 | 0.6 | * | |
| Other Social Scientists | Total | 33378 | 1240 | 3.7 | 4,187 | 12.5 | 7,679 | 23.0 | 6,172 | 18.5 | 4,176 | 12.5 | 1,920 | 5.8 | 1185 | 3.6 | 1016 | 3.0 | 385 | 1.2 | 112 | 0.3 |
| | Women | 6424 | 460 | 7.2 | 1,423 | 22.2 | 1,854 | 28.9 | 1,117 | 17.4 | 429 | 6.7 | 147 | 2.3 | 115 | 1.8 | 38 | 0.6 | 16 | 0.2 | * | |
| Engineers | Total | 65857 | 1294 | 2.0 | 6,394 | 9.7 | 10,092 | 15.3 | 12,512 | 19.0 | 11,780 | 17.9 | 6,103 | 9.3 | 2827 | 4.3 | 2649 | 4.0 | 959 | 1.5 | 228 | 0.3 |
| | Women | 1488 | 93 | 6.3 | 347 | 23.3 | 451 | 30.3 | 257 | 17.3 | 60 | 4.0 | 39 | 2.6 | 7 | 0.5 | 6 | 0.4 | 3 | 0.2 | * | |

+ Total includes those who did not report their years of experience. Percentages are of these totals

* No cases reported.

SOURCE: National Research Council, Unpublished Data

## TABLE 4-10

### EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE AND CITIZENSHIP, 1985

| | | TOTAL | | | | | WHITE | | | | | BLACK | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIELD | SEX | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | |
| | | | Native | Naturlzd | Perm. | Temp. | | Native | Naturlzd | Perm. | Temp. | | Native | Naturlzd | Perm. | Temp. |
| ALL S/E FIELDS | T | 400,385 | 334,542 | 40,683 | 19,739 | 4,277 | 355,125 | 322,217 | 21,294 | 9,619 | 1,422 | 5,716 | 4,567 | 383 | 531 | 184 |
| | W | 58,485 | 50,647 | 4,960 | 2,288 | 388 | 52,035 | 47,986 | 2,601 | 1,193 | 164 | 1,707 | 1,593 | 57 | 50 | 5 |
| Chemists | T | 43,735 | 35,905 | 5113 | 2,263 | 394 | 38,494 | 34,708 | 2,529 | 1,176 | 51 | 380 | 282 | 4 | 53 | 41 |
| | W | 3,805 | 2,858 | 627 | 249 | 54 | 3,099 | 2,758 | 248 | 69 | 14 | 42 | 36 | 2 | 4 | |
| Physicists/ | T | 23,745 | 18,935 | 2,783 | 1,528 | 415 | 21,104 | 18,347 | 1,684 | 901 | 116 | 142 | 108 | 4 | 21 | |
| Astronomers | W | 866 | 644 | 80 | 101 | 33 | 729 | 623 | 38 | 55 | 7 | 7 | 6 | 1 | | |
| Mathematicians/ | T | 16,758 | 13,564 | 2,129 | 814 | 180 | 14,921 | 13,094 | 1,236 | 485 | 90 | 166 | 152 | 14 | | |
| Statisticians | W | 1,559 | 1,235 | 171 | 127 | 22 | 1,335 | 1,192 | 70 | 56 | 15 | 24 | 24 | | | |
| Computer/Info | T | 14,964 | 12,154 | 1,520 | 863 | 377 | 13,064 | 11,830 | 652 | 456 | 80 | 85 | 64 | | | 21 |
| Specialists | W | 1,619 | 1,362 | 174 | 56 | 23 | 1,422 | 1,322 | 69 | 26 | 5 | 10 | 10 | | | |
| Environmental | T | 17,288 | 14,439 | 1,592 | 1,000 | 155 | 15,774 | 14,173 | 951 | 598 | 47 | 98 | 67 | 3 | 28 | |
| Scientists | W | 1,089 | 917 | 100 | 70 | 2 | 996 | 894 | 64 | 38 | | 10 | 7 | 3 | | |
| Biological | T | 59,871 | 51,757 | 5,317 | 2,205 | 438 | 53,910 | 49,902 | 2,644 | 1,151 | 102 | 755 | 592 | 31 | 121 | 11 |
| Scientists | W | 12,637 | 10,523 | 1,419 | 548 | 88 | 10,943 | 10,030 | 584 | 265 | 40 | 266 | 242 | 16 | 8 | |
| Agricultural | T | 15,513 | 13,820 | 998 | 602 | 32 | 14,402 | 13,510 | 481 | 345 | 14 | 121 | 103 | 6 | 12 | |
| Scientists | W | 829 | 696 | 82 | 43 | 8 | 740 | 665 | 52 | 19 | 4 | 15 | 15 | | | |
| Medical | T | 26,454 | 22,595 | 2,566 | 1,002 | 164 | 23,690 | 21,577 | 1,568 | 480 | 17 | 543 | 480 | 5 | 3 | 22 |
| Scientists | W | 6,226 | 5,514 | 503 | 158 | 24 | 5,579 | 5,203 | 254 | 108 | | 219 | 211 | 3 | 3 | |
| Psychologists | T | 52,182 | 49,019 | 2,320 | 681 | 67 | 49,508 | 46,879 | 2,017 | 525 | 47 | 1,190 | 1,147 | 14 | 27 | 2 |
| | W | 16,609 | 15,418 | 844 | 270 | 29 | 15,413 | 14,519 | 680 | 196 | 18 | 608 | 589 | 4 | 13 | 2 |
| Economists | T | 17,925 | 14,569 | 1,640 | 1,298 | 327 | 15,826 | 14,124 | 845 | 686 | 140 | 323 | 193 | 64 | 54 | 3 |
| | W | 1,709 | 1,475 | 101 | 112 | 21 | 1,528 | 1,428 | 55 | 35 | 10 | 42 | 29 | | 10 | 3 |
| Sociologists/ | T | 12,692 | 11,399 | 726 | 495 | 48 | 11,740 | 10,816 | 587 | 280 | 33 | 347 | 311 | 20 | 7 | |
| Anthropologists | W | 3,625 | 3,302 | 191 | 113 | 13 | 3,359 | 3,125 | 148 | 73 | 7 | 128 | 117 | 4 | 7 | |
| Other Social | T | 33,378 | 29,312 | 2,475 | 1,311 | 261 | 30,093 | 27,809 | 1,542 | 566 | 167 | 1,053 | 817 | 181 | 55 | |
| Scientists | W | 6,424 | 5,747 | 362 | 274 | 32 | 5,767 | 5,335 | 219 | 184 | 20 | 296 | 271 | 22 | 3 | |
| Engineers | T | 65,853 | 47,074 | 11,504 | 5,677 | 1,419 | 52,599 | 45,448 | 4,558 | 1,970 | 518 | 513 | 251 | 37 | 150 | 75 |
| | W | 1,488 | 956 | 306 | 167 | 39 | 1,125 | 892 | 120 | 69 | 24 | 40 | 36 | 2 | 2 | |
| Chemical Eng. | T | 7,122 | 4,593 | 1,231 | 1,005 | 226 | 5,130 | 4,490 | 337 | 206 | 44 | 66 | 8 | | 58 | |
| | W | 101 | 61 | 27 | 13 | | 77 | 53 | 14 | 10 | 2 | 2 | | | | |
| Civil Eng. | T | 6,396 | 4,300 | 1,034 | 845 | 217 | 5,063 | 4,270 | 386 | 405 | 2 | 85 | 5 | 3 | 4 | 75 |
| | W | 91 | 65 | 22 | 2 | 2 | 77 | 65 | 10 | | 2 | | | | | |
| Elec/Electronic | T | 14,248 | 9,957 | 2,574 | 1,157 | 531 | 11,386 | 9,577 | 1,156 | 315 | 318 | 90 | 90 | | | |
| Engineers | W | 347 | 187 | 79 | 47 | 14 | 249 | 173 | 31 | 14 | 11 | 11 | 11 | | | |
| Mechanical | W | 6,594 | 4,493 | 1,393 | 625 | 66 | 5,069 | 4,317 | 543 | 189 | 3 | 81 | 18 | | 63 | |
| Engineers | W | 58 | 31 | 14 | 10 | 3 | 44 | 31 | 5 | 5 | 3 | | | | | |

*Includes "Other" and "No Report"

*Includes U.S. citizens whose birthplace is unknown and non-citizens whose visa status is unknown.

## TABLE 4-10 (continued)

### EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE AND CITIZENSHIP, 1985

| FIELD | SEX | ASIAN | | | | | AM. INDIAN/ALASKAN | | | | | HISPANIC† | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | | TOTAL* | U.S. CITIZEN | | NON-CITIZEN | |
| | | | Native | Naturlzd | Perm. | Temp. | | Native | Naturlzd | Perm. | Temp. | | Native | Naturlzd | Perm. | Temp. |
| ALL S/E FIELDS | T | 34,533 | 3,892 | 18,713 | 9,401 | 2,420 | 511 | 501 | | 10 | | 5,897 | 3,487 | 1,497 | 696 | 199 |
| | W | 4,129 | 644 | 2,276 | 991 | 209 | 63 | 63 | | | | 951 | 581 | 250 | 100 | 20 |
| Chemists | T | 4,320 | 458 | 2,536 | 1,017 | 289 | 41 | 41 | | | | 668 | 466 | 161 | 38 | |
| | W | 647 | 56 | 375 | 176 | 40 | | | | | | 93 | 41 | 42 | 10 | |
| Physicists/ | T | 2,241 | 231 | 1,072 | 606 | 282 | 28 | 28 | | | | 275 | 155 | 49 | 63 | 5 |
| Astronomers | W | 120 | 11 | 40 | 46 | 23 | | | | | | 11 | 5 | | 6 | |
| Mathematicians/ | T | 1,368 | 90 | 861 | 327 | 90 | 5 | 5 | | | | 264 | 103 | 106 | 35 | 20 |
| Statisticians | W | 189 | 12 | 101 | 69 | 7 | | | | | | 36 | 19 | 3 | 14 | |
| Computer/Info | T | 1,634 | 86 | 865 | 403 | 276 | 10 | 10 | | | | 226 | 151 | 60 | 2 | 13 |
| Specialists | W | 181 | 24 | 105 | 30 | 18 | 2 | 2 | | | | 7 | 4 | 1 | 2 | |
| Environmental | T | 1,133 | 53 | 625 | 374 | 81 | 18 | 18 | | | | 250 | 108 | 107 | 8 | 27 |
| Scientists | W | 81 | 14 | 33 | 32 | 2 | | | | | | 18 | 2 | 13 | 3 | |
| Biological | T | 4,650 | 817 | 2,598 | 908 | 325 | 52 | 42 | | 10 | | 783 | 515 | 179 | 67 | 22 |
| Scientists | W | 1,313 | 189 | 814 | 260 | 48 | 14 | 14 | | | | 154 | 109 | 41 | 4 | |
| Agricultural | T | 868 | 119 | 509 | 222 | 18 | 33 | 33 | | | | 182 | 72 | 57 | 43 | 10 |
| Scientists | W | 67 | 12 | 30 | 21 | 4 | 2 | 2 | | | | 17 | 4 | 6 | 7 | |
| Medical | T | 1,894 | 290 | 990 | 506 | 85 | 33 | 33 | | | | 417 | 216 | 120 | 73 | 8 |
| Scientists | W | 377 | 57 | 246 | 47 | 24 | 5 | 5 | | | | 84 | 55 | 19 | 10 | |
| Psychologists | T | 756 | 382 | 267 | 89 | 18 | 78 | 78 | | | | 976 | 732 | 178 | 54 | 5 |
| | W | 362 | 146 | 146 | 61 | 9 | 19 | 19 | | | | 313 | 222 | 80 | 6 | 5 |
| Economists | T | 1,532 | 65 | 702 | 553 | 179 | 58 | 58 | | | | 379 | 171 | 48 | 147 | 8 |
| | W | 126 | 15 | 46 | 62 | 3 | | | | | | 36 | 15 | 4 | 9 | 8 |
| Sociologists/ | T | 479 | 156 | 115 | 202 | 6 | 41 | 41 | | | | 202 | 144 | 19 | 39 | |
| Anthropologists | W | 99 | 31 | 35 | 27 | 6 | 4 | 4 | | | | 53 | 39 | 8 | 6 | |
| Other Social | T | 1,776 | 327 | 694 | 661 | 94 | 28 | 28 | | | | 493 | 285 | 130 | 71 | 7 |
| Scientists | W | 254 | 57 | 121 | 64 | 12 | 11 | 11 | | | | 107 | 64 | 21 | 15 | 7 |
| Engineers | T | 11,882 | 768 | 6,879 | 3,533 | 677 | 86 | 86 | | | | 782 | 369 | 283 | 56 | 74 |
| | W | 313 | 20 | 184 | 96 | 13 | 6 | 6 | | | | 22 | 2 | 12 | 8 | |
| Chemical Eng. | T | 1,923 | 92 | 894 | 741 | 182 | 3 | 3 | | | | 68 | 64 | 4 | | |
| | W | 22 | 6 | 13 | 3 | | | | | | | 2 | 1 | 1 | | |
| Civil Eng. | T | 1,182 | 27 | 645 | 436 | 74 | | | | | | 80 | 53 | 3 | 24 | |
| | W | 14 | | 12 | 2 | | | | | | | | | | | |
| Elec/Electron | T | 2,553 | 129 | 1,418 | 842 | 155 | 46 | 46 | | | | 172 | 64 | 50 | | 58 |
| Engineers | W | 87 | 3 | 48 | 33 | 3 | | | | | | 6 | 1 | 5 | | |
| Mechanical | T | 1,354 | 68 | 850 | 373 | 63 | | | | | | 62 | 55 | 7 | | |
| Engineers | W | 14 | | 9 | 5 | | | | | | | | | | | |

†Hispanics also are included in other racial groups

*Includes "Other" and "No Report"

*Includes U.S. citizens whose birthplace is unknown and non-citizens whose visa status is unknown.

SOURCE: Humanities Doctorates in the United States, 1985 Profile, National Research Council

## TABLE 4-11

HUMANITIES DOCTORATES BY FIELD, SEX AND RACIAL/ETHNIC GROUP, 1985

| Demographic Characteristics | Field of Doctorate: All Fields | Amer History | "Other History" | Art History | Music | Speech/ Theater | Phil-osophy | English/ Amer Lang & Lit | Clas-sical Lang & Lit | Modern Lang & Lit | "Other Human-ities" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Population (N) | 90,600 | 8,800 | 12,500 | 2,700 | 6,700 | 3,800 | 7,000 | 23,700 | 1,900 | 16,000 | 7,500 |
| Gender | | | | | | | | | | | |
| Male | 70.3 | 85.1 | 80.9 | 49.2 | 77.5 | 75.2 | 84.6 | 64.9 | 71.1 | 56.4 | 67.5 |
| Female | 29.7 | 14.9 | 19.1 | 50.8 | 22.5 | 24.8 | 15.4 | 35.1 | 28.9 | 43.6 | 32.5 |
| Racial/Ethnic Group | | | | | | | | | | | |
| White | 92.1 | 94.4 | 91.0 | 93.9 | 93.7 | 95.7 | 95.1 | 94.7 | 97.0 | 85.0 | 90.1 |
| Minority Group | 6.6 | 4.0 | 7.4 | 4.6 | 5.6 | 3.1 | 4.4 | 3.5 | 1.8 | 13.9 | 9.0 |
| Hispanic | 2.9 | 0.9 | 2.3 | 1.0 | 0.9 | 0.4 | 1.2 | 1.1 | 0.6 | 10.5 | 1.6 |
| Black | 1.8 | 2.9 | 2.1 | 0.8 | 3.2 | 1.7 | 0.6 | 1.6 | 0.7 | 1.5 | 2.4 |
| Asian | 1.6 | 0.1 | 2.5 | 2.5 | 1.3 | 0.5 | 2.3 | 0.7 | 0.1 | 1.7 | 5.0 |
| American Indian | 0.2 | 0.1 | 0.5 | 0.2 | 0.2 | 0.5 | 0.3 | 0.0 | 0.4 | 0.2 | 0.1 |
| Other | 0.1 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 |
| No Report | 1.3 | 1.3 | 1.6 | 1.3 | 0.7 | 1.2 | 0.4 | 1.8 | 1.2 | 1.0 | 0.8 |

SOURCE: Estimates for 1958-71 based on data by Adolph Wilburn. Estimates since 1971 by CPST based on Degree Data from the National Research Council.

## TABLE 4-12

ESTIMATED PROPORTIONS OF BLACKS AMONG U.S. DOCTORATES AWARDED 1958-85

| FIELD | Total | % of Total | Black | % of Black | Blacks as % of Total |
|---|---|---|---|---|---|
| Physical Sci. & Mathematics | 105,124 | 16.5 | 1,005 | 5.8 | 0.96 |
| Engineering | 53,437 | 8.4 | 331 | 1.9 | 0.62 |
| Life Sciences | 100,831 | 15.8 | 1,525 | 8.8 | 1.51 |
| Social Sciences | 123,945 | 19.5 | 3,201 | 18.4 | 2.58 |
| Arts & Humanities | 88,323 | 13.9 | 1,585 | 9.1 | 1.80 |
| Education | 136,105 | 21.4 | 8,898 | 51.2 | 6.53 |
| Professional Fields | 28,450 | 4.5 | 834 | 4.8 | 2.93 |
| TOTAL, ALL FIELDS | 636,215 | 100.0 | 17,379 | 100.0 | 2.73 |

Note: In years after 1971, only U.S. Citizens and Permanent Visa residents have been counted. Earlier years include total doctorates awarded.

SOURCE: National Research Council, Unpublished Data

## TABLE 4-13

### DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX AND EMPLOYMENT STATUS, 1985

| FIELD OF Ph.D. | TOTAL | | | LABOR FORCE | | | LABOR FORCE PARTICIPATION RATES | | | UNEMPLOYMENT RATES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| All Fields | 416,312 | 354,159 | 62,153 | 395,509 | 337,763 | 57,746 | 95.0 | 95.4 | 92.9 | 0.8 | 0.7 | 1.8 |
| Math | 20,373 | 18,480 | 1,893 | 19,712 | 17,942 | 1,770 | 96.8 | 97.1 | 93.5 | 0.4 | 0.4 | 0.8 |
| Computer Sciences | 3,113 | 2,817 | 296 | 3,107 | 2,816 | 291 | 99.8 | 100.0 | 98.3 | 0.2 | 0.2 | 0.7 |
| Physics/Astronomy | 31,763 | 30,598 | 1,165 | 30,661 | 29,576 | 1,085 | 96.5 | 96.7 | 93.1 | 0.3 | 0.3 | 2.1 |
| Chemistry | 51,970 | 47,521 | 4,449 | 48,374 | 44,297 | 4,077 | 93.1 | 93.2 | 91.6 | 0.9 | 0.8 | 1.7 |
| Earth/Environ. Sci. | 13,945 | 13,008 | 937 | 13,340 | 12,451 | 889 | 95.7 | 95.7 | 94.9 | 0.8 | 0.7 | 1.4 |
| Engineering | 61,979 | 61,012 | 967 | 60,274 | 59,343 | 931 | 97.2 | 97.3 | 96.3 | 0.6 | 0.6 | 1.3 |
| Agriculture Sciences | 20,368 | 19,268 | 1,100 | 18,908 | 17,907 | 1,001 | 92.8 | 92.9 | 91.0 | 0.9 | 0.7 | 3.1 |
| Medical Sciences | 16,431 | 12,165 | 4,266 | 15,662 | 11,656 | 4,006 | 95.3 | 95.8 | 93.9 | 0.7 | 0.6 | 0.8 |
| Biological Sciences | 74,872 | 59,000 | 15,872 | 69,771 | 55,518 | 14,253 | 93.2 | 94.1 | 89.8 | 1.3 | 1.1 | 2.0 |
| Psychology | 57,060 | 38,753 | 18,307 | 54,808 | 37,396 | 17,412 | 96.1 | 96.5 | 95.1 | 0.8 | 0.5 | 1.3 |
| Social Sciences | 64,438 | 51,537 | 12,901 | 60,892 | 48,861 | 12,031 | 94.5 | 94.8 | 93.3 | 1.0 | 0.6 | 2.5 |

SOURCE: National Research Council, Unpublished

## TABLE 4-14

EMPLOYED DOCTORATES BY FIELD, EMPLOYMENT SECTOR AND SEX, 1985

| FIELD | Total Employed** | | | Business Industry | | | Educational Institutions | | | Hospitals and Clinics | | | Non-Profit Organizations | | | Fed. Govt. & Military/Comm. Corps | | | State and Other Government | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| TOTAL ALL FIELDS | 400,358 | 58,485 | 14.6 | 125,767 | 12,945 | 10.3 | 211,611 | 34,338 | 16.2 | 11,352 | 3,393 | 29.9 | 13,617 | 3,184 | 23.4 | 28,212 | 2,787 | 9.9 | 8,217 | 1,624 | 19.8 |
| ALL SCIENTISTS | 334,505 | 56,997 | 17.0 | 87,909 | 12,115 | 13.8 | 189,914 | 33,880 | 17.8 | 11,311 | 3,388 | 30.0 | 11,903 | 3,141 | 26.4 | 24,132 | 2,694 | 11.2 | 7,855 | 1,566 | 19.9 |
| Chemists | 43,735 | 3,805 | 8.7 | 24,067 | 1,473 | 6.1 | 16,073 | 1,850 | 11.5 | 368 | 39 | 10.6 | 1,048 | 145 | 13.8 | 1,831 | 242 | 13.2 | 316 | 33 | 10.4 |
| Physicists/Astron. | 23,745 | 866 | 3.6 | 6,214 | 222 | 3.6 | 13,627 | 498 | 3.7 | 154 | 6 | 3.9 | 1,238 | 56 | 4.5 | 2,453 | 84 | 3.4 | 28 | * | - |
| Mathematicians | 13,957 | 1,233 | 8.8 | 1,393 | 127 | 9.1 | 11,645 | 1,042 | 8.9 | * | * | | 218 | 23 | 10.6 | 638 | 38 | 6.0 | 34 | 3 | 8.8 |
| Statisticians | 2,801 | 326 | 11.6 | 518 | 92 | 17.8 | 1,915 | 179 | 9.3 | * | * | | 75 | 29 | 38.7 | 291 | 24 | 8.2 | * | * | |
| Computer/Info. Spec. | 14,964 | 1,619 | 10.8 | 8,351 | 983 | 11.8 | 5,288 | 483 | 9.1 | 26 | 7 | 26.9 | 329 | 63 | 19.1 | 706 | 30 | 4.2 | 248 | 53 | 21.4 |
| Earth Scientists | 13,202 | 760 | 5.8 | 4,769 | 283 | 5.9 | 5,059 | 304 | 6.0 | * | * | | 344 | 18 | 5.2 | 2,414 | 130 | 5.4 | 607 | 24 | 4.0 |
| Oceanographers | 1,959 | 247 | 12.6 | 162 | 25 | 15.4 | 1,200 | 141 | 11.8 | * | * | | 114 | 16 | 14.0 | 463 | 55 | 11.9 | 20 | 10 | 50.0 |
| Atmospheric Sci. | 2,127 | 82 | 3.9 | 323 | 18 | 5.6 | 963 | 50 | 5.2 | * | * | | 220 | 4 | 1.8 | 582 | 7 | 1.2 | 39 | 3 | 7.7 |
| Biological Sci. | 59,871 | 12,637 | 21.1 | 9,337 | 1,429 | 15.3 | 40,688 | 9,202 | 22.6 | 1,139 | 276 | 24.2 | 2,784 | 745 | 26.8 | 5,049 | 804 | 15.9 | 820 | 165 | 20.1 |
| Agricultural Sci. | 15,513 | 829 | 5.3 | 4,004 | 282 | 7.0 | 8,597 | 425 | 4.9 | 2 | * | - | 306 | 24 | 7.8 | 2,059 | 75 | 3.6 | 427 | 17 | 4.0 |
| Medical Scientists | 26,454 | 6,226 | 23.5 | 5,824 | 839 | 14.4 | 14,310 | 3,822 | 26.7 | 2,932 | 730 | 24.9 | 794 | 218 | 27.5 | 1,581 | 303 | 19.2 | 919 | 313 | 34.1 |
| Psychologists | 52,182 | 16,609 | 31.8 | 15,530 | 5,103 | 32.8 | 24,893 | 7,536 | 30.3 | 6,379 | 2,194 | 34.4 | 2,084 | 1,007 | 48.3 | 1,306 | 248 | 19.0 | 1,916 | 495 | 25.8 |
| Economists | 17,925 | 1,709 | 9.5 | 3,043 | 338 | 11.1 | 11,821 | 966 | 8.2 | 5 | 5 | 100.0 | 402 | 90 | 22.4 | 1,719 | 183 | 10.6 | 160 | 32 | 20.0 |
| Sociol./Anthrop. | 12,692 | 3,625 | 28.6 | 1,069 | 258 | 24.1 | 10,621 | 2,978 | 28.0 | 112 | 83 | 74.1 | 577 | 214 | 37.1 | 182 | 54 | 29.7 | 117 | 33 | 28.2 |
| Other Social Sci. | 33,378 | 6,424 | 19.2 | 3,305 | 643 | 19.5 | 23,214 | 4,404 | 19.0 | 194 | 48 | 24.7 | 1,370 | 489 | 35.7 | 2,858 | 417 | 14.6 | 2,204 | 415 | 18.8 |
| ENGINEERS | 65,853 | 1,488 | 2.3 | 37,858 | 830 | 2.2 | 21,697 | 458 | 2.1 | 41 | 5 | 12.2 | 1,714 | 43 | 2.5 | 4,080 | 93 | 2.3 | 362 | 58 | 16.0 |
| Aero/Astro. | 3,827 | 95 | 2.5 | 2,095 | 55 | 2.6 | 732 | 16 | 2.2 | * | * | | 271 | 6 | 2.2 | 729 | 18 | 2.5 | * | * | |
| Chemical | 7,122 | 101 | 1.4 | 5,097 | 63 | 1.2 | 1,778 | 33 | 1.9 | * | * | | 64 | 2 | 3.1 | 183 | 3 | 1.6 | * | * | |
| Civil | 6,396 | 91 | 1.4 | 2,426 | 9 | 0.4 | 3,409 | 44 | 1.3 | * | * | | 14 | 1 | 7.1 | 319 | 1 | 0.3 | 162 | 35 | 21.6 |
| Elec/Electronic | 14,248 | 347 | 2.4 | 8,566 | 232 | 2.7 | 4,672 | 98 | 2.1 | * | * | | 186 | 5 | 2.7 | 778 | 12 | 1.5 | 46 | * | |
| Materials Science | 7,259 | 244 | 3.4 | 4,788 | 168 | 3.5 | 1,819 | 43 | 2.4 | * | * | | 233 | 10 | 4.3 | 419 | 23 | 5.5 | * | * | |
| Mechanical | 6,594 | 58 | 0.9 | 3,094 | 12 | 0.4 | 2,973 | 41 | 1.4 | * | * | | 194 | 2 | 1.0 | 333 | 3 | 0.9 | * | * | |
| Nuclear | 2,377 | 32 | 1.3 | 1,476 | 18 | 1.2 | 512 | 6 | 1.2 | * | * | | 239 | * | | 91 | 8 | 8.8 | 59 | * | |
| Systems Design | 5,683 | 155 | 4.2 | 2,470 | 84 | 3.4 | 775 | 37 | 4.8 | * | * | | 234 | 8 | 3.4 | 181 | 6 | 3.3 | 23 | 20 | 86.9 |
| Other Engineers | 14,347 | 365 | 2.5 | 7,846 | 189 | 2.4 | 5,027 | 140 | 2.8 | 41 | 5 | 12.2 | 279 | 9 | 3.2 | 1,047 | 19 | 1.8 | 72 | 3 | 4.2 |

* No cases reported. **Includes those who did not report employment sector

SOURCE: Characteristics of Doctoral Scientists and Engineers in the United States: 1985, National Science Foundation

## TABLE 4-15

EMPLOYED MINORITY DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE/ETHNICITY AND EMPLOYMENT SECTOR, 1985

| FIELD | Total+ | | | | Business & Industry | | | | Educational Institutions | | | | Government* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Black | Indian | Asian | Hisp | Black | Indian | Asian | Hisp | Black | Indian | Asian | Hisp | Black | Indian | Asian | Hisp |
| ALL FIELDS | 5716 | 511 | 34533 | 5897 | 969 | 88 | 15097 | 1571 | 3735 | 284 | 15309 | 3139 | 608 | 52 | 2327 | 698 |
| Physical Scientists | 522 | 69 | 6561 | 943 | 137 | 4 | 3627 | 301 | 296 | 65 | 2331 | 480 | 82 | 0 | 420 | 142 |
| Chemists | 380 | 41 | 4320 | 668 | 111 | 2 | 2827 | 264 | 218 | 39 | 1145 | 358 | 44 | 0 | 251 | 29 |
| Phys/Astron. | 142 | 28 | 2241 | 275 | 26 | 2 | 800 | 37 | 78 | 26 | 1186 | 122 | 38 | 0 | 169 | 113 |
| Math Scientists | 166 | 5 | 1368 | 264 | 8 | 2 | 92 | 23 | 145 | 3 | 1156 | 225 | 13 | 0 | 60 | 7 |
| Computer Specialists | 85 | 10 | 1634 | 226 | 39 | 3 | 962 | 126 | 34 | 5 | 621 | 97 | 12 | 2 | 45 | 3 |
| Engineers | 513 | 86 | 11882 | 782 | 299 | 21 | 7875 | 432 | 166 | 57 | 2972 | 267 | 46 | 8 | 657 | 60 |
| Environmental Sci. | 98 | 18 | 1133 | 250 | 31 | 5 | 428 | 39 | 48 | 4 | 368 | 136 | 15 | 9 | 290 | 72 |
| Earth Scientists | 51 | 16 | 913 | 125 | 29 | 5 | 372 | 30 | 8 | 4 | 253 | 76 | 14 | 7 | 251 | 19 |
| Oceanographers | 6 | 0 | 82 | 74 | 0 | 0 | 6 | 4 | 2 | 0 | 52 | 21 | 0 | 0 | 18 | 46 |
| Atmospheric Sci. | 41 | 2 | 138 | 51 | 2 | 0 | 50 | 5 | 38 | 0 | 63 | 39 | 1 | 2 | 21 | 7 |
| Life Scientists | 1419 | 118 | 7412 | 1382 | 132 | 27 | 1594 | 246 | 976 | 60 | 4626 | 815 | 227 | 9 | 502 | 171 |
| Biological Sci. | 755 | 52 | 4650 | 783 | 37 | 9 | 907 | 106 | 600 | 26 | 3058 | 498 | 87 | 3 | 316 | 126 |
| Agricultural Sci. | 121 | 33 | 868 | 182 | 17 | 0 | 369 | 64 | 73 | 25 | 361 | 109 | 19 | 6 | 78 | 9 |
| Medical Sci. | 543 | 33 | 1894 | 417 | 78 | 18 | 318 | 76 | 303 | 9 | 1207 | 208 | 121 | 0 | 108 | 36 |
| Psychologists | 1190 | 78 | 756 | 976 | 200 | 17 | 152 | 271 | 723 | 39 | 401 | 458 | 77 | 12 | 55 | 88 |
| Social Scientists | 1723 | 127 | 3787 | 1074 | 123 | 9 | 367 | 133 | 1347 | 51 | 2834 | 661 | 136 | 12 | 298 | 155 |
| Economists | 323 | 58 | 1532 | 379 | 25 | 0 | 221 | 106 | 242 | 32 | 1034 | 162 | 18 | 0 | 119 | 37 |
| Social/Anthrop. | 347 | 41 | 479 | 202 | 12 | 0 | 31 | 12 | 287 | 12 | 430 | 166 | 20 | 0 | 10 | 10 |
| Other Social Sci. | 1053 | 28 | 1776 | 493 | 86 | 9 | 115 | 15 | 818 | 7 | 1370 | 333 | 98 | 12 | 169 | 108 |

+ Includes those employed in hospitals and clinics, non-profit organizations, other and no report
*Includes federal, state, and local government, military and commissioned corps.

SOURCE: Characteristics of Doctoral Scientists and Engineers in the United States: 1985, National Science Foundation

## TABLE 4-16

### EMPLOYED DOCTORATES BY FIELD, WORK ACTIVITY AND SEX, 1985

| FIELD | Total Employed* | | | Research and Development | | | Management or Administration | | | Teaching | | | Consulting | | | Sales/Professional Services | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W |
| TOTAL ALL FIELDS | 400,358 | 58,485 | 14.6 | 132,515 | 16,463 | 12.4 | 69,632 | 7,083 | 10.2 | 111,717 | 17,620 | 15.8 | 14,164 | 1,434 | 10.1 | 36,496 | 9,791 | 26.8 |
| ALL SCIENTISTS | 336,505 | 56,997 | 17.0 | 106,741 | 15,750 | 14.8 | 53,245 | 6,843 | 12.9 | 99,237 | 17,370 | 17.5 | 10,459 | 1,392 | 13.3 | 34,252 | 9,766 | 28.5 |
| Chemists | 43,735 | 3,805 | 8.7 | 18,373 | 1,568 | 8.5 | 9,039 | 423 | 4.7 | 9,128 | 1,086 | 11.9 | 884 | 46 | 5.2 | 1,581 | 145 | 9.2 |
| Physicists/Astron. | 23,745 | 866 | 3.6 | 11,527 | 477 | 4.1 | 3,958 | 84 | 2.1 | 6,042 | 207 | 3.4 | 322 | 10 | 3.1 | 445 | 11 | 2.5 |
| Mathematicians | 13,957 | 1,233 | 8.8 | 3,182 | 187 | 5.9 | 1,488 | 71 | 4.8 | 8,163 | 869 | 10.6 | 231 | 35 | 15.2 | 149 | 9 | 6.0 |
| Statisticians | 2,801 | 326 | 11.6 | 863 | 106 | 12.6 | 212 | 10 | 4.7 | 1,282 | 116 | 9.0 | 242 | 46 | 19.0 | 64 | 5 | 7.8 |
| Computer/Info. Spec. | 14,964 | 1,619 | 10.8 | 6076 | 576 | 9.5 | 2,862 | 304 | 10.6 | 2,828 | 244 | 8.6 | 914 | 100 | 10.9 | 461 | 84 | 18.2 |
| Earth Scientists | 13,202 | 760 | 5.8 | 4,448 | 269 | 6.0 | 2,618 | 123 | 4.7 | 2,971 | 195 | 6.6 | 1,318 | 38 | 2.9 | 262 | 15 | 5.7 |
| Oceanographers | 1,959 | 247 | 12.6 | 1,148 | 160 | 13.9 | 374 | 37 | 9.9 | 191 | 10 | 5.2 | 61 | 12 | 29.3 | 28 | 1 | 3.6 |
| Atmospheric Sci. | 2,127 | 82 | 3.9 | 1,218 | 50 | 4.1 | 466 | 5 | 1.1 | 231 | 20 | 8.7 | 48 | | 0.0 | 25 | | 0.0 |
| Biological Sci. | 59,871 | 12,637 | 21.1 | 30,057 | 6,966 | 23.2 | 7,264 | 897 | 12.3 | 15,485 | 3,269 | 21.1 | 1,129 | 153 | 13.6 | 1,351 | 275 | 20.4 |
| Agricultural Sci. | 15,513 | 829 | 5.3 | 7,047 | 350 | 5.0 | 3,021 | 111 | 3.7 | 2,324 | 141 | 6.1 | 618 | 7 | 1.1 | 676 | 19 | 2.8 |
| Medical Scientists | 26,454 | 6,226 | 23.5 | 7,486 | 1,522 | 20.3 | 5,378 | 1,281 | 23.8 | 4,621 | 1,575 | 34.1 | 636 | 174 | 27.4 | 5,298 | 856 | 16.2 |
| Psychologists | 52,182 | 16,609 | 31.8 | 5,188 | 1,499 | 28.9 | 6,195 | 1,710 | 27.6 | 13,184 | 3,760 | 28.5 | 2,118 | 534 | 25.2 | 22,044 | 7,889 | 35.8 |
| Economists | 17,925 | 1,709 | 9.5 | 4,430 | 495 | 11.2 | 2,671 | 180 | 6.7 | 7,817 | 651 | 8.3 | 728 | 82 | 11.3 | 681 | 83 | 12.2 |
| Sociol./Anthrop. | 12,692 | 3,625 | 28.6 | 1,595 | 440 | 27.6 | 1,382 | 394 | 28.5 | 7,888 | 2,287 | 29.0 | 285 | 30 | 10.5 | 409 | 155 | 37.9 |
| Other Social Sci. | 33,378 | 6,424 | 19.2 | 4,123 | 1,085 | 26.3 | 6,317 | 1,213 | 19.2 | 17,082 | 2,940 | 17.2 | 945 | 125 | 13.2 | 778 | 219 | 28.1 |
| ENGINEERS | 65,853 | 1,488 | 2.3 | 25,774 | 713 | 2.8 | 16,387 | 240 | 1.5 | 12,480 | 250 | 2.0 | 3,705 | 42 | 1.1 | 2,244 | 25 | 1.1 |

*Includes other and no report

SOURCE: Profiles - Chemistry: Human Resources and Funding, National Science Foundation Special Report (NSF 87-307)

## TABLE 4-17

EMPLOYED SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE AND ETHNICITY, 1986*

| Field | Number | % | Field | Number | % |
|---|---|---|---|---|---|
| Total, All Fields | 4,615,700 | 100.0 | Environmental Scientists | 112,500 | 100.0 |
| Women | 588,900 | 12.8 | Women | 11,700 | 10.4 |
| White | 4,106,500 | 89.0 | White | 106,500 | 94.7 |
| Black | 110,400 | 2.4 | Black | 700 | 0.6 |
| Asian | 266,100 | 5.8 | Asian | 2,600 | 2.3 |
| Native American | 34,900 | 0.8 | Native American | 500 | 0.4 |
| Hispanic | 113,100 | 2.5 | Hispanic | 2,300 | 2.0 |
| Total Scientists | 2,055,100 | 100.0 | Life Scientists | 405,900 | 100.0 |
| Women | 502,500 | 24.5 | Women | 95,400 | 23.5 |
| White | 1,832,900 | 89.2 | White | 371,200 | 91.5 |
| Black | 63,800 | 3.1 | Black | 8,000 | 2.0 |
| Asian | 97,700 | 4.8 | Asian | 14,600 | 3.6 |
| Native American | 14,900 | 0.7 | Native American | 3,500 | 0.9 |
| Hispanic | 51,700 | 2.5 | Hispanic | 9,500 | 2.3 |
| Physical Scientists | 293,800 | 100.0 | Psychologists | 239,700 | 100.0 |
| Women | 32,600 | 11.1 | Women | 100,500 | 41.9 |
| White | 260,400 | 88.6 | White | 221,200 | 92.3 |
| Black | 7,500 | 2.6 | Black | 8,400 | 3.5 |
| Asian | 17,700 | 6.0 | Asian | 2,800 | 1.2 |
| Native American | 1,900 | 0.6 | Native American | 3,100 | 1.3 |
| Hispanic | 5,400 | 1.8 | Hispanic | 5,900 | 2.5 |
| Mathematical Scientists | 116,400 | 100.0 | Social Scientists | 381,700 | 100.0 |
| Women | 25,000 | 21.5 | Women | 106,300 | 27.8 |
| White | 100,400 | 86.3 | White | 330,000 | 86.5 |
| Black | 5,700 | 4.9 | Black | 19,200 | 5.0 |
| Asian | 6,800 | 5.8 | Asian | 18,500 | 4.8 |
| Native American | 800 | 0.7 | Native American | 2,000 | 0.5 |
| Hispanic | 3,600 | 3.1 | Hispanic | 13,700 | 3.6 |
| Computer Scientists | 505,200 | 100.0 | Engineers | 2,560,600 | 100.0 |
| Women | 131,100 | 26.0 | Women | 86,400 | 3.4 |
| White | 443,200 | 87.7 | White | 2,273,500 | 88.8 |
| Black | 14,300 | 2.8 | Black | 46,400 | 1.8 |
| Asian | 34,800 | 6.9 | Asian | 168,400 | 6.6 |
| Native American | 3,000 | 0.6 | Native American | 20,100 | 0.8 |
| Hispanic | 11,200 | 2.2 | Hispanic | 61,400 | 2.4 |

* Preliminary data.

SOURCE: Profiles - Chemistry: Human Resources and Funding, National Science Foundation Special Report (NSF 87-307)

## TABLE 4-18

SELECTED MARKET CHARACTERISTICS OF SCIENTISTS AND ENGINEERS BY FIELD, SEX AND RACE/ETHNICITY, 1986

| Field and racial/ethnic group | Labor force participation rate | | | Unemployment rate | | | S/E employment rate | | | S/E underemployment rate | | | S/E underutilization rate | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| Total, all fields (1) | 95.6 | 95.9 | 94.3 | 1.6 | 1.4 | 3.4 | 86.7 | 88.1 | 77.0 | 2.6 | 1.8 | 7.8 | 4.2 | 3.2 | 11.0 |
| White | 95.5 | 95.7 | 94.1 | 1.5 | 1.2 | 3.4 | 86.8 | 88.1 | 77.0 | 2.5 | 1.8 | 7.4 | 3.9 | 3.0 | 10.5 |
| Black | 98.2 | 98.7 | 96.8 | 2.6 | 2.0 | 4.7 | 81.7 | 84.7 | 71.0 | 6.3 | 3.5 | 15.7 | 8.7 | 5.4 | 19.7 |
| Asian | 96.6 | 97.1 | 93.2 | 2.4 | 2.5 | 1.6 | 90.9 | 92.1 | 83.1 | 1.8 | 1.5 | 3.6 | 4.1 | 3.9 | 5.1 |
| Native American | 97.7 | 97.8 | 96.1 | 3.4 | 1.9 | 18.0 | 78.2 | 78.8 | 71.3 | 3.0 | 1.5 | 20.0 | 6.3 | 3.4 | 34.4 |
| Hispanic (2) | 96.0 | 96.2 | 95.2 | 2.2 | 2.1 | 2.4 | 80.2 | 81.9 | 72.5 | 4.7 | 2.8 | 13.4 | 6.8 | 4.9 | 15.5 |
| Total scientists | 96.0 | 96.6 | 94.2 | 2.1 | 1.6 | 3.5 | 78.7 | 80.2 | 74.1 | 4.5 | 3.1 | 8.9 | 6.5 | 4.7 | 12.1 |
| White | 96.0 | 96.6 | 94.1 | 2.0 | 1.5 | 3.5 | 78.9 | 80.4 | 74.3 | 4.3 | 3.0 | 8.3 | 6.2 | 4.5 | 11.5 |
| Black | 97.8 | 98.4 | 96.7 | 2.8 | 2.1 | 4.3 | 73.4 | 75.6 | 69.0 | 8.9 | 4.8 | 16.9 | 11.4 | 6.8 | 20.5 |
| Asian | 95.8 | 97.0 | 92.8 | 2.2 | 2.5 | 1.4 | 83.3 | 85.2 | 78.6 | 3.2 | 2.7 | 4.4 | 5.3 | 5.1 | 5.8 |
| Native American | 97.6 | 97.1 | 100.0 | 3.6 | (3) | 19.3 | 63.5 | 65.1 | 65.9 | 6.4 | 3.2 | 23.9 | 9.7 | 3.2 | 38.6 |
| Hispanic (2) | 93.1 | 92.3 | 94.8 | 2.0 | 1.8 | 2.3 | 67.6 | 67.2 | 68.3 | 8.8 | 5.4 | 15.7 | 10.6 | 7.0 | 17.7 |
| Physical scientists | 94.6 | 94.9 | 92.0 | 1.9 | 1.6 | 3.7 | 92.1 | 92.1 | 91.7 | 2.2 | 2.1 | 3.2 | 4.0 | 3.6 | 6.8 |
| White | 94.6 | 94.8 | 92.9 | 1.6 | 1.4 | 3.9 | 92.4 | 92.3 | 92.6 | 1.9 | 1.8 | 2.5 | 3.5 | 3.1 | 6.5 |
| Black | 98.1 | 98.8 | 94.6 | 5.6 | 5.5 | 6.1 | 78.9 | 77.9 | 83.7 | 3.2 | 1.8 | 10.3 | 8.6 | 7.2 | 15.7 |
| Asian | 92.6 | 94.9 | 84.8 | 2.3 | 2.6 | 1.3 | 92.6 | 93.3 | 89.7 | 5.5 | 6.2 | 3.2 | 7.7 | 8.6 | 4.4 |
| Native American | 84.6 | 84.1 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 91.9 | 93.2 | 86.5 | 4.4 | 4.7 | 3.3 | 90.9 | 89.3 | 98.4 | 3.6 | 2.9 | 6.5 | 7.8 | 7.4 | 9.6 |
| CHEMISTS | 94.0 | 94.3 | 92.1 | 1.7 | 1.4 | 3.6 | 91.3 | 91.2 | 91.9 | 1.8 | 1.5 | 3.6 | 3.5 | 2.9 | 7.1 |
| White | 94.1 | 94.2 | 92.9 | 1.4 | 1.1 | 3.8 | 91.8 | 91.7 | 92.9 | 1.7 | 1.6 | 2.9 | 3.1 | 2.7 | 6.5 |
| Black | 98.8 | 99.8 | 94.6 | 6.4 | 6.4 | 6.5 | 77.9 | 76.1 | 86.2 | 2.9 | 2.0 | 7.3 | 9.1 | 8.2 | 13.3 |
| Asian | 91.0 | 92.9 | 86.5 | 2.6 | 3.1 | 1.4 | 91.4 | 91.7 | 90.5 | 1.0 | (3) | 3.5 | 3.6 | 3.1 | 4.8 |
| Native American | 82.2 | 81.5 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 94.7 | 97.9 | 83.7 | .8 | (3) | 3.9 | 87.8 | 85.4 | 98.0 | 4.8 | 3.9 | 8.2 | 5.5 | 3.9 | 11.8 |
| Physicists/astronomers | 95.8 | 96.3 | 86.6 | 1.3 | 1.1 | 4.8 | 95.2 | 95.3 | 94.6 | 2.5 | 2.6 | 1.3 | 3.8 | 3.7 | 6.0 |
| White | 95.6 | 96.0 | 88.6 | .9 | .7 | 5.4 | 95.4 | 95.4 | 95.8 | 1.2 | 1.3 | (3) | 2.1 | 1.9 | 5.4 |
| Black | 99.2 | 100.0 | 92.9 | (3) | (3) | (3) | 80.6 | 85.2 | 43.6 | 7.4 | 1.3 | 56.4 | 7.4 | 1.3 | 56.4 |
| Asian | 95.1 | 97.9 | 64.6 | 2.4 | 2.6 | (3) | 94.5 | 94.5 | 95.1 | 21.0 | 22.4 | (3) | 23.0 | 24.4 | (3) |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 82.1 | 80.1 | 100.0 | 17.4 | 19.8 | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 17.4 | 19.8 | (3) |
| Other physical scientists | 95.5 | 95.4 | 96.6 | 4.4 | 4.6 | 3.4 | 89.2 | 89.4 | 87.2 | 3.9 | 4.1 | 2.2 | 8.1 | 8.5 | 5.5 |
| White | 95.5 | 95.3 | 97.0 | 4.8 | 5.0 | 3.4 | 88.5 | 88.6 | 88.3 | 4.2 | 4.5 | 2.2 | 8.7 | 9.2 | 5.6 |
| Black | 81.8 | 81.3 | 100.0 | (3) | (3) | (3) | 95.6 | 95.5 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Asian | 99.7 | 100.0 | 94.9 | (3) | (3) | (3) | 96.8 | 100.0 | 34.7 | (3) | (3) | (3) | (3) | (3) | (3) |
| Native American | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | .6 | (3) | 3.7 | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | .6 | (3) | 3.7 |
| Mathematical scientists | 95.5 | 96.2 | 92.7 | 2.2 | 2.1 | 2.8 | 86.8 | 87.2 | 85.7 | 2.9 | 1.9 | 6.5 | 5.1 | 4.0 | 9.1 |
| White | 95.3 | 96.2 | 92.3 | 1.7 | 1.4 | 2.6 | 85.8 | 86.0 | 85.3 | 2.8 | 1.9 | 6.0 | 4.4 | 3.3 | 8.4 |
| Black | 98.2 | 98.0 | 98.6 | 2.3 | (3) | 6.7 | 91.9 | 89.5 | 96.8 | 3.7 | 4.9 | 5.1 | 5.9 | 4.9 | 7.7 |
| Asian | 95.5 | 95.9 | 91.9 | 9.5 | 10.6 | (3) | 95.3 | 95.8 | 91.1 | 1.9 | 1.4 | 6.0 | 11.5 | 11.9 | 6.0 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 91.2 | 100.0 | 19.5 | 8.8 | (3) | 80.5 | 8.8 | (3) | 80.5 |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 95.3 | 97.3 | 89.2 | 2.7 | (3) | 10.8 | 2.7 | (3) | 19.8 |
| Mathematicians | 95.0 | 95.8 | 91.9 | 2.3 | 2.2 | 2.5 | 86.0 | 86.6 | 83.7 | 3.2 | 2.1 | 7.5 | 5.4 | 4.2 | 9.8 |
| White | 94.7 | 95.7 | 91.4 | 1.6 | 1.4 | 2.1 | 84.7 | 85.2 | 83.0 | 3.1 | 2.0 | 7.3 | 4.6 | 3.4 | 9.2 |
| Black | 98.8 | 98.9 | 98.4 | 2.5 | (3) | 7.5 | 91.1 | 88.7 | 96.3 | 4.0 | 5.3 | 1.2 | 6.4 | 5.3 | 8.7 |
| Asian | 94.5 | 95.1 | 88.2 | 11.6 | 12.7 | (3) | 96.5 | 97.5 | 86.5 | 2.4 | 1.7 | 9.1 | 13.7 | 14.2 | 9.1 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 83.3 | 100.0 | 19.5 | 16.7 | (3) | 80.5 | 16.7 | (3) | 80.5 |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 98.0 | 98.7 | 95.3 | 1.0 | (3) | 4.7 | 1.0 | (3) | 4.7 |
| Statisticians | 98.2 | 98.6 | 96.8 | 2.1 | 1.5 | 4.1 | 91.0 | 90.0 | 94.4 | 1.5 | 1.3 | 2.0 | 3.5 | 2.7 | 6.0 |
| White | 98.1 | 98.7 | 96.4 | 2.4 | 1.7 | 4.6 | 91.3 | 89.9 | 95.8 | 1.1 | 1.5 | (3) | 3.5 | 3.1 | 4.6 |
| Black | 92.8 | 87.9 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Asian | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 99.4 | 88.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 75.7 | 81.1 | 70.7 | 15.1 | (3) | 29.3 | 15.1 | (3) | 29.3 |
| Computer specialists | 98.7 | 99.3 | 97.3 | .6 | .5 | .8 | 77.9 | 77.9 | 77.8 | 2.2 | 2.2 | 2.4 | 2.8 | 2.6 | 3.2 |
| White | 99.0 | 99.6 | 97.3 | .5 | .4 | .8 | 77.7 | 77.8 | 77.3 | 2.0 | 2.1 | 1.7 | 2.5 | 2.5 | 2.6 |
| Black | 99.5 | 100.0 | 98.8 | 1.4 | 1.2 | 1.7 | 81.1 | 78.9 | 84.2 | 5.4 | 3.6 | 7.9 | 6.7 | 4.8 | 9.4 |
| Asian | 98.4 | 99.2 | 96.3 | .9 | 1.0 | .5 | 84.7 | 86.9 | 79.2 | 2.9 | 1.9 | 5.4 | 3.7 | 2.8 | 5.9 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 24.1 | 17.6 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 90.3 | 87.7 | 94.8 | (3) | (3) | (3) | 67.3 | 64.0 | 72.6 | 4.9 | 4.7 | 5.3 | 4.9 | 4.7 | 5.3 |
| Environmental scientists | 95.9 | 96.3 | 92.7 | 3.1 | 2.6 | 7.1 | 91.7 | 92.1 | 88.2 | 3.9 | 3.2 | 10.0 | 6.8 | 5.7 | 16.3 |
| White | 95.9 | 96.3 | 92.4 | 3.1 | 2.6 | 7.4 | 91.4 | 91.8 | 87.7 | 3.8 | 3.1 | 10.5 | 6.8 | 5.6 | 17.1 |
| Black | 85.6 | 82.8 | 100.0 | 2.3 | 1.0 | 8.0 | 98.6 | 98.3 | 100.0 | 1.4 | 1.7 | (3) | 3.7 | 2.7 | 8.0 |
| Asian | 98.9 | 98.8 | 100.0 | (3) | (3) | (3) | 97.4 | 98.3 | 81.3 | 3.4 | 3.6 | (3) | 3.4 | 3.6 | (3) |
| Native American | 94.2 | 93.0 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 97.0 | 96.7 | 100.0 | 3.8 | 4.2 | (3) | 96.2 | 96.6 | 92.6 | 2.4 | 1.5 | 8.8 | 6.0 | 5.7 | 8.8 |
| Earth scientists | 95.7 | 96.2 | 92.0 | 3.1 | 2.6 | 6.6 | 91.1 | 91.6 | 87.2 | 4.3 | 3.5 | 11.3 | 7.2 | 6.0 | 17.2 |
| White | 95.6 | 96.1 | 91.7 | 3.0 | 2.6 | 6.8 | 90.9 | 91.4 | 86.9 | 4.3 | 3.4 | 11.8 | 7.2 | 5.9 | 17.8 |
| Black | 94.0 | 93.0 | 100.0 | 3.0 | 1.3 | 12.0 | 98.2 | 97.9 | 100.0 | 1.8 | 2.1 | (3) | 4.7 | 3.4 | 12.0 |
| Asian | 98.5 | 98.4 | 100.0 | (3) | (3) | (3) | 96.8 | 98.0 | 69.1 | 3.7 | 3.9 | (3) | 3.7 | 3.9 | (3) |
| Native American | 93.0 | 91.2 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 99.4 | 99.3 | 100.0 | 4.5 | 5.0 | (3) | 95.4 | 96.0 | 91.4 | 2.8 | 1.8 | 10.5 | 7.2 | 6.8 | 10.5 |

1. Detail will not average to total. 2. Includes all racial groups. 3. Too few to estimate.

SOURCE: Profiles - Chemistry: Human Resources and Funding, National Science Foundation Special Report (NSF 87-307)

## TABLE 4-18 (continued)

SELECTED MARKET CHARACTERISTICS OF SCIENTISTS AND ENGINEERS BY FIELD, SEX AND RACE/ETHNICITY, 1986

| Field and racial/ethnic group | Labor force participation rate | | | Unemployment rate | | | S/E employment rate | | | S/E underemployment rate | | | S/E underutilization rate | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| Oceanographers | 95.4 | 95.2 | 96.3 | 9.4 | 7.2 | 19.6 | 96.4 | 96.5 | 96.2 | 2.1 | 2.2 | 1.2 | 11.2 | 9.2 | 20.5 |
| White | 97.6 | 97.4 | 98.3 | 10.1 | 7.8 | 20.0 | 96.3 | 96.4 | 96.1 | 2.0 | 2.1 | 1.2 | 11.9 | 9.8 | 21.0 |
| Black | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Asian | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 92.6 | 92.3 | 100.0 | 11.1 | 11.5 | (3) | 11.1 | 11.5 | (3) |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 98.3 | 100.0 | 80.0 | 1.7 | (3) | 20.0 | 1.7 | (3) | 20.0 |
| Atmospheric scientists | 97.3 | 97.3 | 97.1 | 1.4 | 1.2 | 3.3 | 93.7 | 93.8 | 92.6 | 1.5 | 1.4 | 2.7 | 2.8 | 2.6 | 5.9 |
| White | 97.2 | 97.2 | 96.7 | 1.5 | 1.3 | 3.8 | 93.5 | 93.7 | 91.4 | 1.3 | 1.1 | 3.1 | 2.7 | 2.4 | 6.8 |
| Black | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Asian | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | 1.5 | 1.6 | (3) | 1.5 | 1.6 | (3) |
| Native American | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 84.4 | 82.3 | 100.0 | (3) | (3) | (3) | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Life scientists | 94.1 | 95.2 | 91.0 | 2.2 | 1.5 | 4.4 | 83.2 | 83.5 | 82.3 | 5.0 | 3.7 | 9.1 | 7.0 | 5.1 | 13.1 |
| White | 94.1 | 95.2 | 90.6 | 2.1 | 1.5 | 4.3 | 83.1 | 83.2 | 82.7 | 4.8 | 3.7 | 8.9 | 6.8 | 5.1 | 12.8 |
| Black | 95.3 | 97.2 | 90.9 | 1.0 | 1.2 | .6 | 81.2 | 78.7 | 87.4 | 5.4 | 3.7 | 9.4 | 6.3 | 4.8 | 9.9 |
| Asian | 92.7 | 93.2 | 91.9 | 3.6 | 3.0 | 4.5 | 90.0 | 94.4 | 83.0 | 5.2 | 2.6 | 9.3 | 8.6 | 5.5 | 13.5 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 61.4 | 76.2 | 11.6 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 93.0 | 93.0 | 93.0 | 1.4 | 1.9 | .7 | 79.0 | 79.5 | 78.2 | 10.4 | 5.7 | 17.5 | 11.7 | 7.5 | 18.0 |
| Biological scientists | 94.2 | 95.2 | 91.4 | 1.9 | 1.1 | 4.3 | 84.2 | 85.2 | 81.4 | 5.4 | 4.0 | 9.4 | 7.2 | 5.0 | 13.3 |
| White | 94.2 | 95.3 | 91.0 | 1.8 | 1.1 | 4.0 | 84.2 | 84.8 | 82.2 | 5.2 | 4.0 | 9.2 | 6.9 | 5.0 | 12.8 |
| Black | 95.2 | 97.8 | 89.3 | (3) | (3) | (3) | 81.4 | 79.0 | 87.2 | 3.7 | 1.6 | 9.0 | 3.7 | 1.6 | 9.0 |
| Asian | 92.1 | 92.1 | 92.2 | 3.8 | 2.2 | 6.0 | 90.9 | 96.3 | 82.7 | 4.6 | 2.1 | 8.4 | 8.2 | 4.3 | 13.9 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 50.3 | 92.8 | 11.6 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 93.8 | 93.2 | 9..6 | 1.0 | 1.8 | (3) | 78.2 | 79.2 | 77.1 | 10.2 | 3.9 | 17.7 | 11.1 | 5.6 | 17.7 |
| Agricultural scientists | 95.0 | 95.5 | 92.6 | 3.0 | 2.4 | 5.6 | 77.8 | 76.9 | 81.6 | 5.2 | 4.0 | 10.8 | 8.1 | 6.3 | 15.8 |
| White | 94.9 | 95.5 | 92.4 | 3.0 | 2.3 | 6.1 | 77.5 | 76.7 | 81.3 | 5.1 | 4.0 | 10.3 | 8.0 | 6.2 | 15.8 |
| Black | 94.2 | 92.0 | 100.0 | 8.0 | 9.3 | 4.8 | 76.7 | 73.4 | 84.5 | 15.2 | 15.1 | 15.5 | 22.0 | 23.0 | 19.5 |
| Asian | 95.4 | 94.3 | 98.3 | 4.0 | 5.7 | (3) | 85.3 | 90.4 | 73.7 | 11.6 | 5.8 | 24.6 | 15.1 | 11.2 | 24.6 |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 67.4 | 67.4 | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 87.3 | 90.1 | 77.5 | 2.4 | 3.0 | (3) | 86.5 | 86.2 | 87.8 | 14.2 | 13.4 | 17.5 | 16.3 | 16.1 | 17.5 |
| Medical scientists | 91.0 | 93.5 | 82.4 | 1.8 | 1.7 | 2.3 | 92.3 | 92.0 | 93.2 | .7 | .6 | 1.2 | .5 | 2.3 | 3.5 |
| White | 90.7 | 93.2 | 81.7 | 1.9 | 1.7 | 2.6 | 92.3 | 92.1 | 93.0 | .6 | .5 | 1.4 | .5 | 2.1 | 4.0 |
| Black | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 90.5 | 86.8 | 100.0 | 9.5 | 13.2 | (3) | 9.5 | 13.2 | (3) |
| Asian | 92.6 | 100.0 | 85.0 | 2.0 | 3.6 | (3) | 90.7 | 88.4 | 93.5 | (3) | (3) | (3) | 2.0 | 3.6 | (3) |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 100.0 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 100.0 | 100.0 | 100.0 | 5.0 | (3) | 40.0 | 66.5 | 63.7 | 100.0 | (3) | (3) | (3) | 5.0 | (3) | 40.0 |
| Psychologists | 96.3 | 97.0 | 95.5 | 2.5 | 2.1 | 3.1 | 72.4 | 76.5 | 66.7 | 7.7 | 4.5 | 12.0 | 10.0 | 6.5 | 14.7 |
| White | 96.3 | 97.2 | 95.2 | 2.5 | 2.0 | 3.2 | 73.0 | 76.9 | 67.4 | 6.8 | 4.0 | 10.7 | 9.2 | 6.0 | 13.6 |
| Black | 97.9 | 96.6 | 99.0 | 2.9 | 3.1 | 2.8 | 70.9 | 86.3 | 58.3 | 16.8 | 4.4 | 27.0 | 19.2 | 7.3 | 29.1 |
| Asian | 96.5 | 89.4 | 98.2 | 1.1 | (3) | 1.8 | 72.3 | 87.1 | 62.3 | 2.5 | 3.6 | 1.8 | 3.6 | 3.6 | 3.6 |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 78.5 | 73.1 | 100.0 | 20.0 | 14.5 | 42.3 | 20.0 | 14.5 | 42.3 |
| Hispanic (2) | 93.6 | 88.3 | 100.0 | 2.3 | 3.6 | 1.0 | 32.1 | 28.8 | 35.4 | 24.0 | 23.1 | 25.0 | 25.8 | 25.8 | 25.7 |
| Social scientists | 95.6 | 96.4 | 93.7 | 3.5 | 2.5 | 6.0 | 62.3 | 63.4 | 59.5 | 7.7 | 4.6 | 15.9 | 10.9 | 6.9 | 20.9 |
| White | 95.4 | 96.2 | 93.5 | 3.6 | 2.7 | 5.9 | 63.3 | 64.5 | 60.0 | 7.5 | 4.6 | 15.3 | 10.8 | 7.1 | 20.5 |
| Black | 97.9 | 99.1 | 95.0 | 3.6 | 1.7 | 8.4 | 56.9 | 63.6 | 38.9 | 13.5 | 7.6 | 29.2 | 16.6 | 9.2 | 35.2 |
| Asian | 96.5 | 99.1 | 92.2 | .7 | 1.1 | (3) | 61.6 | 56.9 | 70.1 | .6 | .9 | (3) | 1.3 | 2.0 | (3) |
| Native American | 100.0 | 100.0 | 100.0 | 21.3 | (3) | 59.3 | 49.5 | 38.0 | 100.0 | 12.9 | 2.7 | 57.8 | 31.4 | 2.7 | 82.8 |
| Hispanic (2) | 93.7 | 93.6 | 93.9 | 2.9 | .9 | 7.3 | 53.8 | 49.1 | 64.7 | 9.1 | 3.6 | 22.1 | 11.7 | 4.4 | 27.9 |
| Economists | 95.1 | 95.9 | 90.9 | 3.0 | 2.8 | 3.6 | 61.7 | 60.5 | 68.4 | 5.2 | 4.9 | 7.5 | 8.0 | 7.6 | 10.9 |
| White | 95.2 | 95.8 | 91.5 | 3.1 | 2.9 | 4.4 | 63.0 | 62.2 | 68.2 | 5.1 | 4.8 | 7.2 | 8.1 | 7.6 | 11.3 |
| Black | 98.4 | 97.8 | 100.0 | 4.3 | 5.9 | (3) | 47.5 | 43.4 | 57.3 | 16.9 | 17.2 | 16.3 | 20.4 | 22.1 | 16.3 |
| Asian | 93.2 | 98.8 | 78.4 | .5 | .6 | (3) | 52.9 | 44.7 | 79.8 | .5 | .6 | (3) | .9 | 1.2 | (3) |
| Native American | 100.0 | 100.0 | (3) | (3) | (3) | (3) | 42.9 | 42.9 | (3) | 3.6 | 3.6 | (3) | 3.6 | 3.6 | (3) |
| Hispanic (2) | 97.9 | 97.5 | 100.0 | 2.6 | 3.1 | (3) | 65.3 | 59.3 | 100.0 | .5 | .6 | (3) | 3.1 | 3.6 | (3) |
| Sociologists/anthropologists | 95.8 | 97.1 | 94.0 | 3.7 | 2.2 | 5.8 | 61.0 | 66.1 | 53.5 | 11.1 | 4.0 | 21.4 | 14.4 | 6.1 | 26.0 |
| White | 95.6 | 97.2 | 93.5 | 4.2 | 2.4 | 6.6 | 61.8 | 66.5 | 55.1 | 9.9 | 2.9 | 20.1 | 13.7 | 5.2 | 25.4 |
| Black | 96.6 | 98.9 | 92.0 | (3) | (3) | (3) | 53.2 | 62.6 | 33.0 | 25.5 | 9.6 | 59.5 | 25.5 | 9.6 | 59.5 |
| Asian | 99.1 | 100.0 | 98.2 | 1.9 | 3.9 | (3) | 82.7 | 97.2 | 69.0 | 1.4 | 2.8 | (3) | 3.3 | 6.6 | (3) |
| Native American | 100.0 | 100.0 | 100.0 | (3) | (3) | (3) | 46.4 | 31.2 | 100.0 | (3) | (3) | (3) | (3) | (3) | (3) |
| Hispanic (2) | 95.5 | 95.7 | 100.0 | (3) | (3) | (3) | 38.7 | 41.9 | 31.1 | (3) | (3) | (3) | (3) | (3) | (3) |
| Other social scientists | 96.0 | 96.7 | 94.8 | 3.8 | 2.2 | 7.1 | 63.8 | 65.7 | 60.1 | 8.1 | 4.5 | 15.4 | 11.6 | 6.6 | 21.4 |
| White | 95.6 | 96.2 | 94.3 | 3.7 | 2.5 | 5.9 | 64.4 | 66.5 | 60.1 | 8.5 | 5.1 | 15.2 | 11.8 | 7.5 | 20.2 |
| Black | 98.4 | 100.0 | 94.2 | 5.5 | (3) | 20.7 | 65.4 | 75.9 | 28.8 | 3.0 | .9 | 10.3 | 8.3 | .9 | 28.9 |
| Asian | 99.3 | 98.9 | 100.0 | (3) | (3) | (3) | 55.9 | 49.7 | 63.1 | (3) | (3) | (3) | (3) | (3) | (3) |
| Native American | 100.0 | 100.0 | 100.0 | 58.5 | (3) | 65.7 | 73.5 | (3) | 100.0 | 56.0 | (3) | 76.2 | 81.8 | (3) | 91.9 |
| Hispanic (2) | 89.2 | 89.7 | 88.5 | 6.4 | (3) | 14.5 | 64.3 | 49.8 | 85.9 | 26.1 | 11.6 | 47.6 | 30.8 | 11.6 | 55.2 |
| Total engineers | 95.4 | 95.4 | 94.7 | 1.3 | 1.2 | 2.8 | 93.1 | 93.1 | 94.1 | 1.0 | 1.0 | 1.8 | 2.3 | 2.2 | 4.6 |
| White | 95.1 | 95.1 | 94.6 | 1.1 | 1.0 | 2.8 | 93.1 | 93.0 | 93.9 | 1.0 | 1.0 | 1.7 | 2.0 | 2.0 | 4.4 |
| Black | 98.8 | 99.0 | 97.2 | 2.2 | 1.8 | 7.3 | 93.1 | 93.8 | 84.1 | 2.7 | 2.3 | 8.0 | 4.9 | 4.1 | 14.6 |
| Asian | 97.1 | 97.2 | 94.7 | 2.5 | 2.5 | 2.1 | 95.3 | 95.1 | 98.4 | 1.0 | 1.0 | 1.0 | 3.4 | 3.4 | 3.1 |
| Native American | 97.7 | 98.3 | 78.2 | 3.3 | 3.1 | 10.3 | 89.1 | 88.9 | 100.0 | .4 | .4 | (3) | 3.7 | 3.5 | 10.3 |
| Hispanic (2) | 98.5 | 98.6 | 97.6 | 2.4 | 2.3 | 2.5 | 90.8 | 90.6 | 94.1 | 1.3 | 1.3 | 1.8 | 3.6 | 3.6 | 4.2 |

1. Detail will not average to total. 2. Includes all racial groups. 3. Too few to estimate.

SOURCE: Earned Degrees Conferred, 1950 through 1986, Department of Education Center for Statistics; and Profiles - Chemistry: Human Resources and Funding, National Science Foundation, 1987

## TABLE 4-19

NUMBER OF BACHELOR'S DEGREES GRANTED, 1950-1985 COMPARED WITH 1986 POPULATION OF SCIENTISTS AND ENGINEERS, BY FIELD AND SEX

| FIELD | BACHELOR'S DEGREES, 1950-1985 | | | | SCIENTISTS & ENGINEERS, 1986 | | | | S/Es in 1986 as a % of B.S. Degrees Granted 1950-1985 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | % W | Total | Men | Women | % W | Men | Women |
| Physical/Environmental Sciences | 905,349 | 747,013 | 158,336 | 17.5 | 433,600 | 367,200 | 66,400 | 15.3 | 51.8 | 31.8 |
| Math/Statistical/Computer Sciences | 959,467 | 614,769 | 344,698 | 35.9 | 639,300 | 475,700 | 163,600 | 25.6 | 77.4 | 47.5 |
| Biological/Agricultural Sciences | 2,367,044 | 1,685,421 | 681,623 | 28.8 | 440,900 | 332,100 | 109,800 | 24.9 | 19.6 | 16.1 |
| Psychology | 1,417,150 | 664,456 | 752,694 | 53.1 | 255,300 | 146,700 | 108,600 | 42.5 | 22.1 | 14.4 |
| Social Sciences | 2,810,263 | 1,781,676 | 1,028,587 | 36.6 | 413,600 | 293,000 | 120,600 | 29.2 | 16.4 | 11.7 |
| Engineering | 2,054,968 | 1,964,167 | 90,801 | 4.4 | 2,719,300 | 2,625,400 | 93,900 | 3.5 | 133.7 | 103.4 |
| Total Science & Engineering | 10,514,241 | 7,457,502 | 3,056,739 | 29.1 | 4,905,900 | 4,259,000 | 646,900 | 13.2 | 57.1 | 21.2 |

SOURCE: Employment and Earnings, U.S. Department of Labor

## TABLE 4-20

Women as a Percentage of All Employed Workers

| | 1960 | 1970 | 1975 | 1980 | 1985 |
|---|---|---|---|---|---|
| All Workers | 32.7 | 37.8 | 39.6 | 42.4 | 44.1 |
| Architects | 2.0 | 5.6 | 4.3 | 6.7 | 11.5 |
| Computer Specialists | | 19.6 | 21.2 | 29.7 | 30.0 |
| Engineers | 0.9 | 1.6 | 1.1 | 4.0 | 6.7 |
| Lawyers & Judges | 3.4 | 4.8 | 7.1 | 12.9 | 18.2 |
| Librarians | | | 81.1 | 85.2 | 87.0 |
| Biological Scientists | 27.6 | 16.2 | 31.5 | 37.5 | 33.3 |
| Chemists | 8.0 | 11.9 | 14.5 | 20.3 | 21.0 |
| Systems Analysts | | 9.6 | 15.3 | 28.7 | 28.0 |
| Pharmacists | 8.0 | 11.9 | 17.6 | 25.0 | 29.8 |
| Physicians | 6.8 | 9.2 | 13.0 | 13.4 | 17.2 |
| Dentists | 2.1 | 3.4 | 1.8 | 4.3 | 6.5 |
| Economists | 14.0 | 11.2 | 13.1 | 25.4 | 34.5 |
| Psychologists | 30.5 | 38.1 | 42.6 | 50.9 | 50.4 |
| Social Workers | | | 60.8 | 65.0 | 66.7 |
| Coll/Univ Teachers | 21.6 | 28.4 | 31.1 | 33.9 | 35.2 |
| Secondary Teachers | | | 49.2 | 52.1 | 54.0 |
| Pers/Labor Rel. Spec. | 30.1 | | 36.5 | 46.9 | 56.5 |
| Electricians | | 0.2 | 0.6 | 1.2 | 1.6 |
| Carpenters | | 0.9 | 0.6 | 1.5 | 1.2 |

SOURCE: Profiles - Chemistry: Human Resources and Funding, National Science Foundation Special Report (NSF 87-307)

## TABLE 4-21

EMPLOYED SCIENTISTS AND ENGINEERS BY FIELD, SEX AND EMPLOYER, 1986*

| Field | Total Employed | | Industry | | Educational Ins | | Federal Gov | | State/Local Gov | | Nonprofit Org | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | % | Number | %M | Number | %M | Number | %M | Number | %M | Number | %M | Number | %M |
| Total, All Fields | 4,615,798 | 100.0 | 3,166,200 | 68.6 | 620,500 | 13.4 | 354,600 | 7.7 | 225,800 | 4.9 | 165,700 | 3.6 | 82,900 | 1.8 |
| Women | 588,900 | 12.8 | 330,000 | 56.0 | 133,700 | 22.7 | 35,800 | 6.1 | 32,800 | 5.6 | 49,200 | 8.4 | 7,300 | 1.2 |
| Men | 4,026,800 | 87.2 | 2,836,200 | 70.4 | 486,800 | 12.1 | 318,700 | 7.9 | 193,000 | 4.8 | 116,500 | 2.9 | 75,600 | 1.9 |
| Total Scientists | 2,055,198 | 100.0 | 1,106,100 | 53.8 | 524,100 | 25.5 | 160,900 | 7.8 | 106,400 | 5.2 | 124,400 | 6.1 | 33,200 | 1.6 |
| Women | 502,500 | 24.5 | 261,000 | 51.9 | 128,900 | 25.7 | 29,900 | 6.0 | 29,000 | 5.8 | 48,100 | 9.6 | 5,700 | 1.1 |
| Men | 1,552,600 | 75.5 | 845,200 | 54.4 | 395,200 | 25.5 | 131,000 | 8.4 | 77,500 | 5.0 | 76,300 | 4.9 | 27,500 | 1.8 |
| Physical Scientists | 293,800 | 100.0 | 170,100 | 57.9 | 70,500 | 24.0 | 28,200 | 9.6 | 9,800 | 3.3 | 11,600 | 3.9 | 3,700 | 1.3 |
| Women | 32,600 | 11.1 | 18,800 | 57.7 | 7,900 | 24.2 | 2,200 | 6.7 | 1,600 | 4.9 | 1,400 | 4.3 | 800 | 2.5 |
| Men | 261,200 | 88.9 | 151,300 | 57.9 | 62,600 | 24.0 | 26,000 | 10.0 | 8,200 | 3.1 | 10,200 | 3.9 | 2,900 | 1.1 |
| Mathematical Scientists | 116,499 | 100.0 | 47,500 | 40.8 | 54,000 | 46.4 | 9,900 | 8.5 | 1,700 | 1.5 | 2,400 | 2.1 | 900 | 0.8 |
| Women | 25,100 | 21.5 | 11,200 | 44.6 | 9,900 | 39.4 | 2,400 | 9.6 | 500 | 2.0 | 900 | 3.6 | 100 | 0.4 |
| Men | 91,400 | 78.5 | 36,400 | 39.8 | 44,100 | 48.2 | 7,500 | 8.2 | 1,100 | 1.2 | 1,500 | 1.6 | 800 | 0.9 |
| Computer Specialists | 505,200 | 100.0 | 399,400 | 79.1 | 35,000 | 6.9 | 33,500 | 6.6 | 15,900 | 3.1 | 14,300 | 2.8 | 7,000 | 1.4 |
| Women | 131,199 | 26.0 | 99,100 | 75.5 | 11,100 | 8.5 | 9,700 | 7.4 | 5,400 | 4.1 | 4,700 | 3.6 | 1,100 | 0.8 |
| Men | 374,100 | 74.0 | 300,300 | 80.3 | 23,900 | 6.4 | 23,800 | 6.4 | 10,600 | 2.8 | 9,600 | 2.6 | 5,900 | 1.6 |
| Environmental Scientists | 112,598 | 100.0 | 66,500 | 59.1 | 18,100 | 16.1 | 17,100 | 15.2 | 6,500 | 5.8 | 1,600 | 1.4 | 2,700 | 2.4 |
| Women | 11,797 | 10.5 | 6,100 | 51.7 | 2,300 | 19.5 | 1,900 | 16.1 | 800 | 6.8 | 300 | 2.5 | 300 | 2.5 |
| Men | 100,800 | 89.5 | 60,400 | 59.9 | 15,800 | 15.7 | 15,300 | 15.2 | 5,700 | 5.7 | 1,300 | 1.3 | 2,300 | 2.3 |
| Life Scientists | 405,998 | 100.0 | 148,700 | 36.6 | 150,700 | 37.1 | 44,600 | 11.0 | 27,700 | 6.8 | 28,100 | 6.9 | 6,100 | 1.5 |
| Women | 95,400 | 23.5 | 31,700 | 33.2 | 38,500 | 40.4 | 7,600 | 8.0 | 5,500 | 5.8 | 11,400 | 11.9 | 800 | 0.8 |
| Men | 310,500 | 76.5 | 117,100 | 37.7 | 112,200 | 36.1 | 37,000 | 11.9 | 22,200 | 7.1 | 16,800 | 5.4 | 5,300 | 1.7 |
| Psychologists | 239,798 | 100.0 | 88,200 | 36.8 | 86,100 | 35.9 | 5,700 | 2.4 | 13,000 | 5.4 | 43,100 | 18.0 | 3,600 | 1.5 |
| Women | 100,599 | 42.0 | 42,600 | 42.3 | 31,500 | 31.3 | 1,400 | 1.4 | 6,300 | 6.3 | 17,800 | 17.7 | 900 | 0.9 |
| Men | 139,199 | 58.0 | 45,600 | 32.8 | 54,600 | 39.2 | 4,400 | 3.2 | 6,600 | 4.7 | 25,300 | 18.2 | 2,700 | 1.9 |
| Social Scientists | 381,700 | 100.0 | 185,600 | 48.6 | 109,700 | 28.7 | 21,800 | 5.7 | 31,900 | 8.4 | 23,300 | 6.1 | 9,300 | 2.4 |
| Women | 106,300 | 27.8 | 51,500 | 48.4 | 27,700 | 26.1 | 4,700 | 4.4 | 8,800 | 8.3 | 11,800 | 11.1 | 1,700 | 1.6 |
| Men | 275,400 | 72.2 | 134,100 | 48.7 | 82,000 | 29.8 | 17,100 | 6.2 | 23,100 | 8.4 | 11,500 | 4.2 | 7,600 | 2.8 |
| Engineers | 2,560,698 | 100.0 | 2,060,100 | 80.5 | 96,500 | 3.8 | 193,700 | 7.6 | 119,300 | 4.7 | 41,300 | 1.6 | 49,700 | 1.9 |
| Women | 86,400 | 3.4 | 69,000 | 79.9 | 4,800 | 5.6 | 6,000 | 6.9 | 3,800 | 4.4 | 1,100 | 1.3 | 1,600 | 1.9 |
| Men | 2,474,300 | 96.6 | 1,991,100 | 80.5 | 91,600 | 3.7 | 187,700 | 7.6 | 115,500 | 4.7 | 40,200 | 1.6 | 48,100 | 1.9 |

* Preliminary data

SOURCE: Profiles - Chemistry: Human Resources and Funding, National Science Foundation Special Report (NSF 87-307)

## TABLE 4-22

EMPLOYED SCIENTISTS AND ENGINEERS BY FIELD, SEX AND PRIMARY WORK ACTIVITY, 1986

| Field | Total Employed | | Research & Dev. | | Management/Adm. | | Teaching | | Production/Insp | | Reporting/Comp | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | % | Number | M% | Number | M% | Number | M% | Number | M% | Number | M% | Number | M% |
| Total, All Fields | 4,615,700 | 100.0 | 1,310,900 | 28.4 | 1,322,500 | 28.7 | 345,000 | 7.5 | 625,000 | 13.5 | 433,400 | 9.4 | 578,900 | 12.5 |
| Women | 588,900 | 12.8 | 137,300 | 23.3 | 108,500 | 18.4 | 71,700 | 12.2 | 52,800 | 9.0 | 110,900 | 18.8 | 107,700 | 18.3 |
| Men | 4,026,800 | 87.2 | 1,173,600 | 29.1 | 1,214,100 | 30.2 | 273,300 | 6.8 | 572,100 | 14.2 | 322,500 | 8.0 | 471,200 | 11.7 |
| Total Scientists | 2,055,100 | 100.0 | 463,000 | 22.5 | 530,800 | 25.8 | 288,700 | 14.0 | 160,200 | 7.8 | 325,000 | 15.8 | 287,400 | 14.0 |
| Women | 502,500 | 24.5 | 102,700 | 20.4 | 95,800 | 19.1 | 67,800 | 13.5 | 34,200 | 6.8 | 102,700 | 20.4 | 99,200 | 19.7 |
| Men | 1,552,600 | 75.5 | 360,300 | 23.2 | 435,000 | 28.0 | 220,900 | 14.2 | 126,000 | 8.1 | 222,200 | 14.3 | 188,100 | 12.1 |
| Physical Scientists | 293,800 | 100.0 | 116,000 | 39.5 | 77,300 | 26.3 | 42,800 | 14.6 | 37,100 | 12.6 | 7,000 | 2.4 | 13,500 | 4.6 |
| Women | 32,600 | 11.1 | 13,300 | 40.8 | 2,700 | 8.3 | 5,100 | 15.6 | 7,400 | 22.7 | 1,800 | 5.5 | 2,300 | 7.1 |
| Men | 261,200 | 88.9 | 102,700 | 39.3 | 74,600 | 28.6 | 37,700 | 14.4 | 29,700 | 11.4 | 5,300 | 2.0 | 11,200 | 4.3 |
| Mathematical Scientists | 116,400 | 100.0 | 17,100 | 14.7 | 33,600 | 28.9 | 44,600 | 38.3 | 3,300 | 2.8 | 13,400 | 11.5 | 4,400 | 3.8 |
| Women | 25,000 | 21.5 | 3,000 | 12.0 | 7,200 | 28.8 | 9,000 | 36.0 | 400 | 1.6 | 3,700 | 14.8 | 1,700 | 6.8 |
| Men | 91,400 | 78.5 | 14,100 | 15.4 | 26,400 | 28.9 | 35,600 | 38.9 | 2,900 | 3.2 | 9,700 | 10.6 | 2,700 | 3.0 |
| Computer Specialists | 505,200 | 100.0 | 94,500 | 18.7 | 90,800 | 18.0 | 16,400 | 3.2 | 15,300 | 3.0 | 246,900 | 48.9 | 41,200 | 8.2 |
| Women | 131,100 | 26.0 | 23,300 | 17.8 | 14,700 | 11.2 | 5,600 | 4.3 | 3,300 | 2.5 | 75,400 | 57.5 | 8,600 | 6.6 |
| Men | 374,100 | 74.0 | 71,200 | 19.0 | 76,100 | 20.3 | 10,800 | 2.9 | 11,900 | 3.2 | 171,500 | 45.8 | 32,600 | 8.7 |
| Environmental Scientists | 112,500 | 100.0 | 40,200 | 35.7 | 19,900 | 17.7 | 8,300 | 7.4 | 26,300 | 23.4 | 7,600 | 6.8 | 10,100 | 9.0 |
| Women | 11,700 | 10.4 | 5,600 | 47.9 | 1,200 | 10.3 | 1,000 | 8.5 | 2,100 | 17.9 | 1,000 | 8.5 | 800 | 6.8 |
| Men | 100,800 | 89.6 | 34,600 | 34.3 | 18,700 | 18.6 | 7,300 | 7.2 | 24,300 | 24.1 | 6,600 | 6.5 | 9,300 | 9.2 |
| Life Scientists | 405,900 | 100.0 | 130,900 | 32.2 | 105,800 | 26.1 | 62,100 | 15.3 | 47,900 | 11.8 | 11,300 | 2.8 | 47,800 | 11.8 |
| Women | 95,400 | 23.5 | 38,300 | 40.1 | 15,200 | 15.9 | 14,200 | 14.9 | 11,300 | 11.8 | 2,900 | 3.0 | 13,600 | 14.3 |
| Men | 310,500 | 76.5 | 92,600 | 29.8 | 90,700 | 29.2 | 47,900 | 15.4 | 36,600 | 11.8 | 8,500 | 2.7 | 34,200 | 11.0 |
| Psychologists | 239,700 | 100.0 | 17,000 | 7.1 | 61,300 | 25.6 | 40,300 | 16.8 | 11,600 | 4.8 | 4,500 | 1.9 | 105,000 | 43.8 |
| Women | 100,500 | 41.9 | 6,900 | 6.9 | 21,900 | 21.8 | 13,400 | 13.3 | 4,300 | 4.3 | 2,300 | 2.3 | 51,700 | 51.4 |
| Men | 139,300 | 58.1 | 10,100 | 7.3 | 39,400 | 28.3 | 27,000 | 19.4 | 7,300 | 5.2 | 2,200 | 1.6 | 53,300 | 38.3 |
| Social Scientists | 381,700 | 100.0 | 47,200 | 12.4 | 142,000 | 37.2 | 74,200 | 19.4 | 18,700 | 4.9 | 34,100 | 8.9 | 65,400 | 17.1 |
| Women | 106,300 | 27.8 | 12,200 | 11.5 | 32,900 | 31.0 | 19,500 | 18.3 | 5,400 | 5.1 | 15,700 | 14.8 | 20,500 | 19.3 |
| Men | 275,400 | 72.2 | 35,000 | 12.7 | 109,100 | 39.6 | 54,700 | 19.9 | 13,200 | 4.8 | 18,400 | 6.7 | 44,900 | 16.3 |
| Engineers | 2,560,600 | 100.0 | 847,800 | 33.1 | 791,800 | 30.9 | 56,300 | 2.2 | 464,700 | 18.1 | 108,400 | 4.2 | 291,500 | 11.4 |
| Women | 86,400 | 3.4 | 34,600 | 40.0 | 12,700 | 14.7 | 3,900 | 4.5 | 18,600 | 21.5 | 8,200 | 9.5 | 8,400 | 9.7 |
| Men | 2,474,200 | 96.6 | 813,300 | 32.9 | 779,100 | 31.5 | 52,300 | 2.1 | 446,100 | 18.0 | 100,200 | 4.0 | 283,100 | 11.4 |

* Preliminary data

SOURCE: Characteristics of Recent Science/Engineering Graduates: 1986, National Science Foundation, In press.

## TABLE 4-23

### 1984 AND 1985 BACHELOR'S GRADUATES IN THE LABOR FORCE IN 1986 BY SEX AND RACE/ETHNICITY

1984 GRADUATES

| FIELD OF DEGREE | TOTAL POPULATION | | | TOTAL POPULATION | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | WHITE | BLACK | ASIAN | NATIVE | HISPANIC |
| TOTAL, ALL FIELDS | 233,300 | 152,600 | 80,700 | 209,900 | 7,400 | 6,900 | 200 | 8,900 |
| TOTAL,SCIENCES | 160,100 | 88,800 | 71,300 | 143,400 | 5,900 | 4,000 | 100 | 6,600 |
| PHYSICAL SCIENCES | 10,100 | 6,300 | 3,800 | 9,300 | 300 | 300 | (3) | 100 |
| CHEMISTRY | 6,200 | 2,900 | 3,200 | 5,700 | 300 | 200 | (3) | (3) |
| PHYSICS/ASTRONOMY | 2,100 | 1,800 | 300 | 2,000 | 100 | (3) | (3) | (3) |
| OTHER PHYS SCIENCES | 1,800 | 1,600 | 200 | 1,800 | (3) | 100 | (3) | (3) |
| MATH/STATISTICS | 12,700 | 6,800 | 5,900 | 11,500 | 600 | 300 | (3) | 200 |
| COMPUTER SCIENCE | 30,400 | 19,700 | 10,700 | 28,100 | 500 | 1,100 | 100 | 1,000 |
| ENVIRON SCIENCE | 4,600 | 3,200 | 1,400 | 4,400 | (3) | (3) | (3) | 200 |
| LIFE SCIENCES | 28,800 | 14,300 | 14,600 | 27,000 | 700 | 400 | (3) | 800 |
| BIOLOGY | 19,400 | 8,300 | 11,000 | 17,900 | 700 | 400 | (3) | 300 |
| AGR SCIENCE | 9,500 | 5,900 | 3,500 | 9,100 | (3) | 100 | (3) | 400 |
| PSYCHOLOGY | 21,300 | 6,200 | 15,100 | 19,300 | 1,100 | 400 | (3) | 800 |
| SOCIAL SCIENCES | 52,200 | 32,300 | 19,900 | 43,800 | 2,700 | 1,500 | (3) | 3,700 |
| ECONOMICS | 18,700 | 14,200 | 4,500 | 15,100 | 700 | 1,100 | (3) | 1,100 |
| SOCIO/ANTHRO | 10,100 | 3,900 | 6,200 | 9,200 | 900 | (3) | (3) | 300 |
| OTHER SOC SCIENCES | 23,400 | 14,100 | 9,200 | 19,500 | 1,100 | 300 | (3) | 2,300 |
| TOTAL,ENGINEERING | 73,200 | 63,800 | 9,400 | 68,500 | 1,500 | 2,900 | 100 | 2,300 |
| AERO/ASTRO | 2,600 | 2,200 | 300 | 2,200 | 200 | (3) | (3) | 200 |
| CHEMICAL | 5,700 | 4,200 | 1,600 | 5,300 | 100 | 300 | (3) | 200 |
| CIVIL | 9,300 | 7,900 | 1,400 | 8,500 | 200 | 300 | (3) | 400 |
| ELECT/ELECTRON | 21,400 | 19,600 | 1,800 | 18,800 | 700 | 1,300 | (3) | 700 |
| INDUSTRIAL | 4,500 | 3,700 | 800 | 4,000 | 200 | 200 | (3) | 100 |
| MATERIALS | 1,100 | 700 | 400 | 1,000 | (3) | (3) | (3) | 100 |
| MECHANICAL | 17,000 | 15,300 | 1,700 | 16,000 | 100 | 300 | (3) | 200 |
| MINING | 1,000 | 900 | 100 | 1,000 | (3) | (3) | (3) | (3) |
| NUCLEAR | 400 | 400 | (1) | 400 | (3) | (3) | (3) | (3) |
| PETROLEUM | 1,200 | 1,000 | 200 | 1,100 | (3) | (3) | (3) | 100 |
| OTHER ENGINEERING | 8,000 | 7,900 | 1,000 | 8,200 | (3) | 400 | 100 | 200 |

1985 GRADUATES

| FIELD OF DEGREE | TOTAL POPULATION | | | TOTAL POPULATION | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | WHITE | BLACK | ASIAN | NATIVE | HISPANIC |
| TOTAL, ALL FIELDS | 263,700 | 163,300 | 100,400 | 236,100 | 8,600 | 10,000 | 900 | 7,000 |
| TOTAL,SCIENCES | 188,000 | 98,000 | 90,000 | 167,800 | 7,300 | 6,600 | 700 | 5,000 |
| PHYSICAL SCIENCES | 10,100 | 5,500 | 4,600 | 9,100 | 400 | 300 | (3) | 200 |
| CHEMISTRY | 5,400 | 2,800 | 2,600 | 4,700 | 200 | 300 | (3) | 100 |
| PHYSICS/ASTRONOMY | 2,000 | 1,600 | 300 | 1,900 | (3) | (3) | (3) | 100 |
| OTHER PHYS SCIENCES | 2,700 | 900 | 1,800 | 2,500 | 100 | (3) | (3) | (3) |
| MATH/STATISTICS | 14,100 | 6,200 | 7,800 | 12,800 | 900 | 300 | (3) | 300 |
| COMPUTER SCIENCE | 37,800 | 22,400 | 15,300 | 33,900 | 1,000 | 2,000 | 100 | 700 |
| ENVIRON SCIENCE | 5,900 | 4,700 | 1,200 | 5,700 | (3) | 100 | (3) | 100 |
| LIFE SCIENCES | 29,100 | 14,600 | 14,500 | 24,900 | 900 | 1,800 | (3) | 1,300 |
| BIOLOGY | 20,000 | 8,800 | 11,200 | 16,500 | 800 | 1,700 | (3) | 1,200 |
| AGR SCIENCE | 9,000 | 5,700 | 3,300 | 8,400 | 100 | 200 | (3) | 200 |
| PSYCHOLOGY | 25,500 | 8,300 | 17,100 | 23,700 | 800 | 300 | 200 | 700 |
| SOCIAL SCIENCES | 65,600 | 36,200 | 29,400 | 57,700 | 3,800 | 1,700 | 300 | 1,700 |
| ECONOMICS | 23,100 | 15,700 | 7,300 | 19,900 | 1,300 | 600 | (3) | 600 |
| SOCIO/ANTHRO | 12,100 | 5,300 | 6,900 | 9,000 | 1,800 | 300 | 300 | 900 |
| OTHER SOC SCIENCES | 30,400 | 15,200 | 15,200 | 28,900 | 700 | 800 | (3) | 200 |
| TOTAL,ENGINEERING | 75,700 | 65,300 | 10,400 | 68,300 | 1,500 | 3,500 | 200 | 2,000 |
| AERO/ASTRO | 2,200 | 2,000 | 100 | 2,000 | (3) | 100 | (3) | 100 |
| CHEMICAL | 5,600 | 4,000 | 1,600 | 4,600 | 200 | 400 | (3) | 100 |
| CIVIL | 8,400 | 7,500 | 900 | 7,900 | 100 | 200 | (3) | 100 |
| ELECT/ELECTRON | 24,100 | 21,500 | 2,600 | 21,000 | 400 | 1,900 | (3) | 800 |
| INDUSTRIAL | 5,300 | 4,000 | 1,400 | 4,900 | 200 | 100 | (3) | 300 |
| MATERIALS | 1,100 | 900 | 200 | 1,100 | (3) | (3) | (3) | (3) |
| MECHANICAL | 17,000 | 15,400 | 1,600 | 15,400 | 300 | 700 | 100 | 300 |
| MINING | 900 | 800 | 100 | 900 | (3) | (3) | (3) | (3) |
| NUCLEAR | 300 | 200 | (1) | 200 | (3) | (3) | (3) | (3) |
| PETROLEUM | 1,400 | 1,200 | 200 | 1,300 | (3) | (3) | (3) | (3) |
| OTHER ENGINEERING | 9,400 | 7,900 | 1,500 | 8,900 | 100 | 100 | 100 | 200 |

SOURCE: Characteristics of Recent Science/Engineering Graduates: 1986, National Science Foundation, In press.

## TABLE 4-24

### 1984 AND 1985 MASTER'S GRADUATES IN THE LABOR FORCE IN 1986 BY SEX AND RACE/ETHNICITY

1984 GRADUATES

| FIELD OF DEGREE | TOTAL POPULATION | | | TOTAL POPULATION | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | WHITE | BLACK | ASIAN | NATIVE | HISPANIC |
| TOTAL, ALL FIELDS | 42,200 | 30,500 | 11,700 | 35,200 | 1,400 | 3,700 | 100 | 1,600 |
| TOTAL,SCIENCES | 27,500 | 17,400 | 10,100 | 22,700 | 900 | 2,500 | 100 | 1,300 |
| PHYSICAL SCIENCES | 1,900 | 1,400 | 500 | 1,700 | (3) | 100 | (3) | 100 |
| CHEMISTRY | 900 | 600 | 300 | 800 | (3) | (3) | (3) | (3) |
| PHYSICS/ASTRONOMY | 700 | 600 | 100 | 600 | (3) | 100 | (3) | (3) |
| OTHER PHYS SCIENCES | 300 | 200 | 100 | 300 | (3) | (3) | (3) | (3) |
| MATH/STATISTICS | 3,000 | 1,900 | 1,100 | 2,600 | 200 | 100 | 100 | 100 |
| COMPUTER SCIENCE | 7,500 | 5,600 | 1,900 | 5,800 | 200 | 1,200 | (3) | 200 |
| ENVIRON SCIENCE | 1,400 | 1,100 | 300 | 1,400 | (3) | (3) | (3) | (3) |
| LIFE SCIENCES | 5,600 | 3,000 | 2,700 | 4,900 | 200 | 300 | (3) | 200 |
| BIOLOGY | 3,800 | 1,800 | 2,000 | 3,200 | 200 | 200 | (3) | 100 |
| AGR SCIENCE | 1,800 | 1,200 | 700 | 1,700 | 100 | (3) | (3) | 100 |
| PSYCHOLOGY | 1,800 | 800 | 1,000 | 1,400 | 100 | (3) | (3) | 100 |
| SOCIAL SCIENCES | 6,500 | 3,800 | 2,700 | 4,900 | 300 | 800 | 100 | 600 |
| ECONOMICS | 1,700 | 1,200 | 500 | 900 | (3) | 800 | (3) | 200 |
| SOCIO/ANTHRO | 1,300 | 500 | 800 | 1,000 | 100 | (3) | 100 | 200 |
| OTHER SOC SCIENCES | 3,500 | 2,100 | 1,400 | 3,000 | 200 | (3) | (3) | 200 |
| TOTAL,ENGINEERING | 14,700 | 13,200 | 1,500 | 12,500 | 500 | 1,200 | (3) | 400 |
| AERO/ASTRO | 200 | 200 | (1) | 200 | (3) | (3) | (3) | (3) |
| CHEMICAL | 1,200 | 1,000 | 200 | 900 | (3) | 300 | (3) | (3) |
| CIVIL | 2,300 | 2,100 | 300 | 2,000 | (3) | 200 | (3) | 100 |
| ELECT/ELECTRON | 4,400 | 4,000 | 400 | 3,800 | 200 | 400 | (3) | 100 |
| INDUSTRIAL | 900 | 800 | 100 | 700 | (3) | 100 | (3) | (3) |
| MATERIALS | 400 | 300 | 100 | 300 | (3) | 100 | (3) | (3) |
| MECHANICAL | 2,200 | 2,000 | 200 | 1,800 | 100 | 100 | (3) | (3) |
| MINING | 100 | 100 | (1) | 100 | (3) | (3) | (3) | (3) |
| NUCLEAR | 300 | 300 | (1) | 300 | (3) | (3) | (3) | (3) |
| PETROLEUM | 200 | 200 | (1) | 200 | (3) | (3) | (3) | (3) |
| OTHER ENGINEERING | 2,500 | 2,200 | 400 | 2,300 | 100 | 100 | (3) | 100 |

1985 GRADUATES

| FIELD OF DEGREE | TOTAL POPULATION | | | TOTAL POPULATION | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | WHITE | BLACK | ASIAN | NATIVE | HISPANIC |
| TOTAL, ALL FIELDS | 48,100 | 33,600 | 14,500 | 41,000 | 1,000 | 4,100 | 100 | 1,200 |
| TOTAL,SCIENCES | 31,500 | 18,900 | 12,600 | 27,300 | 700 | 2,300 | 100 | 800 |
| PHYSICAL SCIENCES | 2,300 | 1,600 | 700 | 2,100 | 100 | 100 | (3) | 100 |
| CHEMISTRY | 1,200 | 900 | 300 | 1,100 | 100 | 100 | (3) | (3) |
| PHYSICS/ASTRONOMY | 600 | 500 | 100 | 500 | (3) | 100 | (3) | (3) |
| OTHER PHYS SCIENCES | 500 | 300 | 300 | 500 | (3) | (3) | (3) | (3) |
| MATH/STATISTICS | 3,100 | 2,000 | 1,100 | 2,700 | 100 | 200 | (3) | (3) |
| COMPUTER SCIENCE | 8,700 | 6,600 | 2,100 | 6,700 | 100 | 1,400 | (3) | 200 |
| ENVIRON SCIENCE | 2,100 | 1,700 | 400 | 2,000 | 100 | (3) | (3) | 100 |
| LIFE SCIENCES | 5,300 | 2,400 | 2,900 | 4,900 | 100 | 100 | (3) | 100 |
| BIOLOGY | 3,300 | 1,200 | 2,100 | 3,000 | 100 | 100 | (3) | 100 |
| AGR SCIENCE | 2,000 | 1,200 | 700 | 1,800 | (3) | (3) | (3) | (3) |
| PSYCHOLOGY | 2,500 | 800 | 1,700 | 2,200 | (3) | 100 | (3) | (3) |
| SOCIAL SCIENCES | 7,500 | 3,800 | 3,600 | 6,700 | 300 | 400 | (3) | 200 |
| ECONOMICS | 1,900 | 1,100 | 800 | 1,600 | 100 | 200 | (3) | (3) |
| SOCIO/ANTHRO | 1,500 | 400 | 1,100 | 1,400 | (3) | (3) | (3) | (3) |
| OTHER SOC SCIENCES | 4,000 | 2,300 | 1,700 | 3,700 | 200 | 100 | (3) | 100 |
| TOTAL,ENGINEERING | 16,600 | 14,700 | 1,900 | 13,800 | 200 | 1,900 | (3) | 500 |
| AERO/ASTRO | 700 | 600 | 200 | 700 | (3) | (3) | (3) | (3) |
| CHEMICAL | 1,200 | 1,000 | 200 | 1,000 | (3) | 100 | (3) | (3) |
| CIVIL | 2,400 | 2,200 | 200 | 1,900 | (3) | 300 | (3) | 100 |
| ELECT/ELECTRON | 5,000 | 4,600 | 500 | 3,900 | 100 | 800 | (3) | 200 |
| INDUSTRIAL | 700 | 600 | 100 | 500 | (3) | 100 | (3) | (3) |
| MATERIALS | 500 | 400 | 100 | 500 | (3) | 100 | (3) | (3) |
| MECHANICAL | 2,700 | 2,500 | 200 | 2,200 | (3) | 400 | (3) | (3) |
| MINING | 200 | 200 | (1) | 200 | (3) | (3) | (3) | (3) |
| NUCLEAR | 200 | 200 | (1) | 200 | (3) | (3) | (3) | (3) |
| PETROLEUM | 200 | 100 | (1) | 100 | (3) | (3) | (3) | (3) |
| OTHER ENGINEERING | 2,800 | 2,400 | 400 | 2,600 | 100 | 100 | (3) | 100 |

SOURCE: Characteristics of Recent Science/Engineering Graduates: 1986, National Science Foundation, in press.

## TABLE 4-25

RATES OF LABOR FORCE PARTICIPATION, UNEMPLOYMENT, S/E EMPLOYMENT AND S/E UTILIZATION OF RECENT S/E GRADUATES BY DEGREE LEVEL, FIELD AND SEX, 1986

| Field of Degree | Labor Force Participation(1) | | Unemployment Rate (2) | | S/E Employment Rate(3) | | S/E Utilization Rate (4) | |
|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Men | Women |
| BACHELOR'S GRADUATES | | | | | | | | |
| Total S/E | 98.6 | 97.1 | 3.4 | 3.6 | 69.9 | 52.9 | 67.6 | 50.9 |
| Physical Scientists | 98.3 | 95.2 | 1.7 | 1.3 | 71.7 | 62.8 | 69.8 | 61.3 |
| Math Scientists | 98.5 | 97.8 | 2.3 | 1.5 | 71.2 | 75.8 | 69.5 | 74.6 |
| Computer Scientists | 99.8 | 100.0 | 2.9 | 2.3 | 88.7 | 89.8 | 86.2 | 87.7 |
| Environmental Scientists | 98.7 | 100.0 | 5.1 | 3.8 | 60.8 | 58.3 | 57.7 | 53.8 |
| Life Scientists | 96.9 | 96.8 | 3.6 | 5.8 | 60.8 | 52.5 | 58.2 | 49.3 |
| Psychologists | 98.6 | 94.1 | 8.4 | 4.0 | 28.2 | 24.9 | 25.9 | 24.1 |
| Social Scientists | 97.4 | 98.8 | 4.3 | 4.3 | 32.8 | 27.5 | 31.3 | 26.3 |
| Engineers | 99.5 | 97.5 | 2.4 | 2.1 | 89.3 | 88.4 | 87.1 | 86.5 |
| MASTER'S GRADUATES | | | | | | | | |
| Total S/E | 98.9 | 95.0 | 1.6 | 3.2 | 86.7 | 77.9 | 85.5 | 75.1 |
| Physical Scientists | 100.0 | 83.3 | | | 89.7 | 80.0 | 86.7 | 80.0 |
| Math Scientists | 100.0 | 95.5 | | | 89.5 | 90.0 | 87.2 | 85.7 |
| Computer Scientists | 99.2 | 97.5 | | | 89.3 | 92.1 | 89.3 | 89.7 |
| Environmental Scientists | 100.0 | 85.7 | 7.1 | | 92.6 | 85.7 | 89.3 | 100.0 |
| Life Scientists | 100.0 | 98.2 | 3.7 | 3.6 | 80.8 | 80.0 | 77.8 | 72.7 |
| Psychologists | 100.0 | 96.3 | 7.1 | 3.8 | 61.5 | 72.0 | 57.1 | 69.2 |
| Social Scientists | 97.4 | 93.7 | 2.7 | 5.1 | 58.3 | 53.4 | 56.8 | 52.5 |
| Engineers | 99.3 | 97.1 | 1.1 | | 94.5 | 100.0 | 93.1 | 97.0 |

NOTE: Data are based on combined 1984 and 1985 graduating cohorts and exclude full-time graduate students. Blanks are due to too few unemployed to compute. 100%s result from too few outside the labor force to compute.

(1) Percent of those employed plus those unemployed and seeking of the total population.

(2) Percent of those not employed but seeking of the total labor force.

(3) Percent of those holding jobs in science or engineering of total employed graduates in S/E.

(4) Percent of those holding jobs in science or engineering of number in the labor force.

SOURCE: Characteristics of Recent Science/Engineering Graduates: 1986, National Science Foundation, In press.

## TABLE 4-26

### NUMBER OF 1984 AND 1985 BACHELOR'S AND MASTER'S GRADUATES BY FIELD OF DEGREE, EMPLOYMENT STATUS AND SEX IN 1986

| Field of Degree | Total Population | | | Labor Force | | | Total Employ | | | Employment in Sci/Eng | | | Unemployed | | | Outside Labor Force | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | W | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| BACHELOR'S GRADS | | | | | | | | | | | | | | | | | | |
| Total S/E | 497000 | 315900 | 181100 | 487500 | 311400 | 175900 | 470500 | 301100 | * | 300100 | 210400 | 89600 | 16900 | 10500 | 6400 | 9500 | 4500 | 5200 |
| Physical Scientists | 20200 | 11800 | 8400 | 19600 | 11600 | 8000 | 19100 | 11300 | * | 13000 | 8100 | 4900 | 400 | 200 | 100 | 600 | 200 | 400 |
| Math Scientists | 26800 | 13000 | 13700 | 26300 | 12800 | 13400 | 25700 | 12500 | * | 18900 | 8900 | 10000 | 500 | 300 | 200 | 500 | 200 | 300 |
| Computer Scientists | 68200 | 42100 | 26000 | 68000 | 42000 | 26000 | 66100 | 40800 | * | 58900 | 36200 | 22800 | 1900 | 1200 | 600 | 200 | 100 | |
| Environmental Scientists | 10500 | 7900 | 2600 | 10200 | 7800 | 2600 | 9800 | 7400 | * | 6000 | 4500 | 1400 | 400 | 400 | 100 | 300 | 100 | |
| Life Scientists | 57900 | 28900 | 29100 | 55500 | 28000 | 27600 | 52700 | 26800 | * | 29900 | 16300 | 13600 | 2800 | 1000 | 1600 | 2400 | 900 | 1500 |
| Psychologists | 46800 | 14500 | 32200 | 44800 | 14300 | 30300 | 42400 | 13100 | * | 11000 | 3700 | 7300 | 2300 | 1200 | 1200 | 2000 | 200 | 1900 |
| Social Scientists | 117800 | 68500 | 49300 | 115400 | 66700 | 48700 | 110300 | 63800 | * | 33700 | 20900 | 12800 | 5100 | 2900 | 2100 | 2400 | 1800 | 600 |
| Engineers | 148900 | 129100 | 19800 | 147800 | 128500 | 19300 | 144200 | 125300 | * | 128600 | 111900 | 16700 | 3500 | 3100 | 400 | 1100 | 600 | 500 |
| MASTER'S GRADUATES | | | | | | | | | | | | | | | | | | |
| Total S/E | 90300 | 64100 | 26200 | 88400 | 63400 | 24900 | 86500 | 62500 | * | 67900 | 54200 | 18700 | 1900 | 1000 | 800 | 1900 | 700 | 1300 |
| Physical Scientists | 4200 | 3000 | 1200 | 4000 | 3000 | 1000 | 3900 | 2900 | * | 3400 | 2600 | 800 | | | | 200 | | 200 |
| Math Scientists | 6100 | 3900 | 2200 | 5900 | 3900 | 2100 | 5800 | 3800 | * | 5300 | 3400 | 1800 | 100 | | | 200 | | 100 |
| Computer Scientists | 16200 | 12200 | 4000 | 16000 | 12100 | 3900 | 15900 | 12100 | * | 14300 | 10800 | 3500 | 100 | | | 200 | 100 | 100 |
| Environmental Scientists | 3500 | 2800 | 700 | 3500 | 2800 | 600 | 3300 | 2700 | * | 3000 | 2500 | 600 | 200 | 200 | | | | 100 |
| Life Scientists | 10900 | 5400 | 5600 | 10600 | 5400 | 5500 | 10200 | 5200 | * | 8200 | 4200 | 4000 | 400 | 200 | 200 | 300 | | 100 |
| Psychologists | 4100 | 1400 | 2700 | 4000 | 1400 | 2600 | 3700 | 1300 | * | 2500 | 800 | 1800 | 100 | 100 | 100 | 100 | | 100 |
| Social Scientists | 14000 | 7600 | 6300 | 13400 | 7400 | 5900 | 13000 | 7200 | * | 7300 | 4200 | 3100 | 400 | 200 | 300 | 600 | 200 | 400 |
| Engineers | 31300 | 27900 | 3400 | 31000 | 27700 | 3300 | 30600 | 27300 | * | 28900 | 25800 | 3200 | 400 | 300 | | 300 | 200 | 100 |

SOURCE: Women and Minorities in Science and Engineering, National Science Foundation, January 1986

## TABLE 4-27

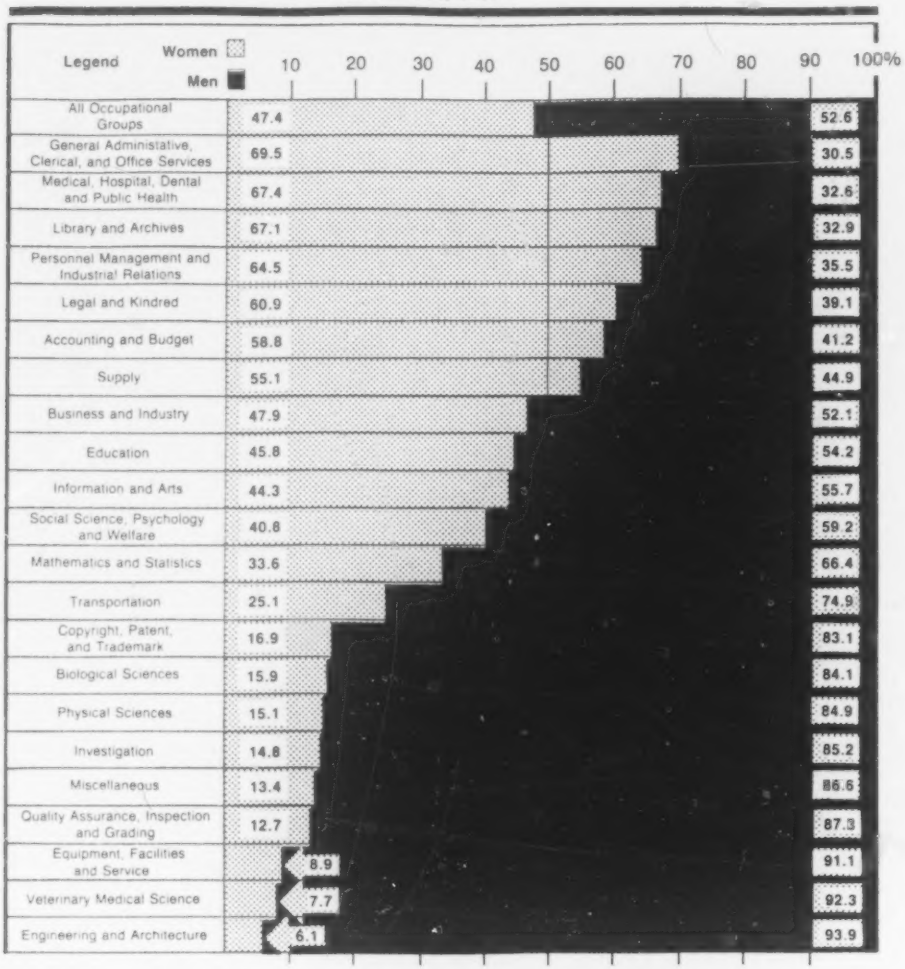
SELECTED CHARACTERISTICS OF PHYSICALLY HANDICAPPED SCIENTISTS AND ENGINEERS, 1984

| Field | Type of physical handicap | | | | |
|---|---|---|---|---|---|
| | Total population | Visual | Auditory | Ambulatory | Other |
| Total scientists and engineers | 91,600 | 20,000 | 15,700 | 21,400 | 34,400 |
| Scientists | 40,200 | 8,800 | 8,500 | 9,100 | 13,800 |
| Physical scientists | 6,500 | 1,600 | 800 | 1,800 | 2,300 |
| Mathematical scientists | 2,500 | 400 | 900 | 500 | 700 |
| Computer specialists | 10,000 | 2,000 | 3,100 | 2,000 | 2,900 |
| Environmental scientists | 2,900 | 600 | 500 | 600 | 1,200 |
| Life scientists | 5,700 | 1,600 | 800 | 1,000 | 2,200 |
| Psychologists | 7,500 | 1,500 | 1,100 | 1,400 | 3,500 |
| Social scientists | 5,300 | 1,200 | 1,300 | 1,800 | 1,000 |
| Engineers | 51,300 | 11,300 | 7,200 | 12,300 | 20,700 |

SOURCE: Occupations of Federal White Collar and Blue Collar Workers, Office of Personnel Management, October 31, 1985

TABLE 4-28

DISTRIBUTION OF FULL—TIME WHITE-COLLAR EMPLOYMENT BY GENDER WITHIN OCCUPATIONAL GROUP, OCTOBER 31, 1985



SOURCES: Bureau of Labor Statistics and National Science Foundation

TABLE 4-29

## FEDERAL SCIENTISTS AND ENGINEERS BY MANAGEMENT/SUPERVISORY STATUS, AGENCY & RACE, 1985

| Management or supervisory status | Total | De-fense, total | Army | Navy | Air Force | Other De-fense | VA | USDA | HHS | Inte-rior | NASA | Com-merce | DOT | DOE | EPA | TVA | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All races | | | | | | | | | | | All races | | | | | |
| Total personnel | 238,041 | 119,434 | 42,279 | 48,197 | 19,164 | 9,794 | 5,343 | 29,943 | 9,676 | 16,066 | 11,335 | 9,045 | 6,066 | 4,357 | 5,000 | 4,399 | 17,377 |
| Supervisor/manager | 62,876 | 30,724 | 9,648 | 14,172 | 4,679 | 2,225 | 1,404 | 10,322 | 2,226 | 3,954 | 2,485 | 2,877 | 1,964 | 1,494 | 1,178 | - | 4,248 |
| Non-management/ non-supervisory | 169,976 | 88,452 | 32,430 | 33,986 | 14,477 | 7,559 | 3,753 | 19,620 | 7,448 | 12,107 | 8,850 | 6,151 | 4,028 | 2,863 | 3,806 | - | 12,898 |
| Status unknown | 5,189 | 258 | 201 | 39 | 8 | 10 | 186 | 1 | 2 | 5 | - | 17 | 74 | - | 16 | 4,399 | 231 |
| | White | | | | | | | | | | | White | | | | | |
| Total personnel | 208,920 | 103,997 | 37,007 | 41,534 | 16,906 | 8,550 | 4,610 | 27,203 | 7,931 | 14,863 | 10,292 | 7,858 | 5,213 | 3,929 | 4,392 | 4,038 | 14,594 |
| Supervisor/manager | 58,002 | 28,189 | 8,902 | 12,971 | 4,330 | 1,986 | 1,276 | 9,705 | 1,938 | 3,722 | 2,406 | 2,645 | 1,780 | 1,404 | 1,105 | - | 3,832 |
| Non-management/ non-supervisory | 146,163 | 75,569 | 27,915 | 28,531 | 12,368 | 6,555 | 3,161 | 17,497 | 5,991 | 11,136 | 7,886 | 5,198 | 3,361 | 2,525 | 3,272 | - | 10,567 |
| Status unknown | 4,755 | 239 | 190 | 32 | 8 | 9 | 173 | 1 | 2 | 5 | - | 15 | 72 | - | 15 | 4,038 | 195 |
| | Black | | | | | | | | | | | Black | | | | | |
| Total personnel | 11,957 | 5,552 | 2,036 | 2,006 | 699 | 811 | 324 | 1,110 | 964 | 245 | 408 | 658 | 353 | 128 | 260 | 192 | 1,763 |
| Supervisor/manager | 1,821 | 886 | 260 | 383 | 112 | 131 | 48 | 201 | 140 | 38 | 23 | 112 | 80 | 17 | 35 | - | 241 |
| Non-management/ non-supervisory | 9,913 | 4,661 | 1,772 | 1,622 | 587 | 680 | 275 | 909 | 824 | 207 | 385 | 545 | 273 | 111 | 224 | - | 1,499 |
| Status unknown | 223 | 5 | 4 | 1 | - | - | 1 | - | - | - | - | 1 | - | - | 1 | 192 | 23 |
| | Asian | | | | | | | | | | | Asian | | | | | |
| Total personnel | 9,868 | 6,333 | 1,855 | 3,541 | 736 | 201 | 210 | 546 | 525 | 291 | 310 | 325 | 235 | 170 | 231 | 107 | 585 |
| Supervisor/manager | 1,644 | 1,020 | 237 | 634 | 109 | 40 | 40 | 143 | 96 | 38 | 26 | 78 | 57 | 35 | 24 | - | 87 |
| Non-management/ non-supervisory | 8,091 | 5,304 | 1,614 | 2,902 | 627 | 161 | 160 | 403 | 429 | 253 | 284 | 246 | 177 | 135 | 207 | - | 493 |
| Status unknown | 133 | 9 | 4 | 5 | - | - | 10 | - | - | - | - | 1 | 1 | - | - | 107 | 5 |
| | Other | | | | | | | | | | | Other | | | | | |
| Total personnel | 7,296 | 3,552 | 1,381 | 1,116 | 823 | 232 | 199 | 1,084 | 256 | 667 | 325 | 204 | 265 | 130 | 117 | 62 | 435 |
| Supervisor/manager | 1,409 | 629 | 249 | 184 | 128 | 68 | 40 | 273 | 52 | 156 | 30 | 42 | 47 | 38 | 14 | - | 88 |
| Non-management/ non-supervisory | 5,809 | 2,918 | 1,129 | 931 | 695 | 163 | 157 | 811 | 204 | 511 | 295 | 162 | 217 | 92 | 103 | - | 339 |
| Status unknown | 78 | 5 | 3 | 1 | - | 1 | 2 | - | - | - | - | - | 1 | - | - | 62 | 8 |

SOURCES: Bureau of Labor Statistics and National Science Foundation

TABLE 4-30

## FEDERAL SCIENTISTS AND ENGINEERS BY MANAGEMENT/SUPERVISORY STATUS, AGENCY AND SEX, 1985

| Management or supervisory status | Total | De-fense, total | Army | Navy | Air Force | Other De-fense | VA | USDA | HHS | Inte-rior | NASA | Com-merce | DOT | DOE | EPA | TVA | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | | | | | | | Total | | | | | | | | |
| Total personnel | 238,041 | 119,434 | 42,279 | 48,197 | 19,164 | 9,794 | 5,343 | 29,943 | 9,676 | 16,066 | 11,335 | 9,045 | 6,066 | 4,357 | 5,000 | 4,399 | 17,377 |
| Supervisor/manager | 62,876 | 30,724 | 9,648 | 14,172 | 4,679 | 2,225 | 1,404 | 10,322 | 2,226 | 3,954 | 2,485 | 2,877 | 1,964 | 1,494 | 1,178 | - | 4,248 |
| Non-management/ non-supervisory | 169,976 | 88,452 | 32,430 | 33,986 | 14,477 | 7,559 | 3,753 | 19,620 | 7,448 | 12,107 | 8,850 | 6,151 | 4,028 | 2,863 | 3,806 | - | 12,898 |
| Status unknown | 5,189 | 258 | 201 | 39 | 8 | 10 | 186 | 1 | 2 | 5 | - | 17 | 74 | - | 16 | 4,399 | 231 |
| | Female | | | | | | | | Female | | | | | | | | |
| Total personnel | 32,883 | 15,436 | 5,557 | 5,868 | 2,062 | 1,949 | 1,010 | 3,202 | 3,187 | 1,667 | 1,033 | 1,488 | 426 | 425 | 911 | 406 | 3,692 |
| Supervisor/manager | 3,233 | 1,255 | 402 | 487 | 169 | 197 | 117 | 394 | 387 | 111 | 53 | 282 | 37 | 70 | 82 | - | 445 |
| Non-management/ non-supervisory | 29,135 | 14,158 | 5,140 | 5,378 | 1,891 | 1,749 | 872 | 2,808 | 2,800 | 1,556 | 980 | 1,204 | 389 | 355 | 827 | - | 3,186 |
| Status unknown | 515 | 23 | 15 | 3 | 2 | 3 | 21 | - | - | - | - | 2 | - | - | 2 | 406 | 61 |
| | Male | | | | | | | | Male | | | | | | | | |
| Total personnel | 205,153 | 103,998 | 36,722 | 42,329 | 17,102 | 7,845 | 4,331 | 26,741 | 6,489 | 14,399 | 10,302 | 7,557 | 5,640 | 3,932 | 4,089 | 3,993 | 13,682 |
| Supervisor/manager | 59,640 | 29,469 | 9,246 | 13,685 | 4,510 | 2,028 | 1,285 | 9,928 | 1,839 | 3,843 | 2,432 | 2,595 | 1,927 | 1,424 | 1,096 | - | 3,802 |
| Non-management/ non-supervisory | 140,840 | 74,294 | 27,290 | 28,608 | 12,586 | 5,810 | 2,881 | 16,812 | 4,648 | 10,551 | 7,870 | 4,947 | 3,639 | 2,508 | 2,979 | - | 9,711 |
| Status unknown | 4,673 | 235 | 186 | 36 | 6 | 7 | 165 | 1 | 2 | 5 | - | 15 | 74 | - | 14 | 3,993 | 169 |
| | No report | | | | | | | | No report | | | | | | | | |
| Total personnel | 5 | - | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | 3 |
| Supervisor/manager | 3 | - | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | 1 |
| Non-management/ non-supervisory | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Status unknown | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |

SOURCE: National Research Council, Unpublished Data

## TABLE 5-1

### DOCTORAL SCIENTISTS AND ENGINEERS IN ACADEMIC INSTITUTIONS BY FIELD, SEX AND RANK, 1985

| Fields | Total Faculty* | Professor | % | Associate Professor | % | Assistant Professor | % | Instructor | % | Other | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Fields | | | | | | | | | | | |
| Men | 122106 | 59795 | 49.0 | 34469 | 28.2 | 21438 | 17.6 | 854 | 0.7 | 4817 | 3.9 |
| Women | 21254 | 4308 | 20.3 | 6796 | 32.0 | 7672 | 36.1 | 599 | 2.8 | 1733 | 8.2 |
| All Scientists | | | | | | | | | | | |
| Men | 106661 | 51951 | 48.7 | 30501 | 28.6 | 18449 | 17.3 | 884 | 0.8 | 4294 | 4.0 |
| Women | 20922 | 4277 | 20.4 | 6680 | 31.9 | 7516 | 35.9 | 597 | 2.9 | 1706 | 8.2 |
| Chemists | | | | | | | | | | | |
| Men | 9790 | 5838 | 59.6 | 1987 | 20.3 | 1211 | 12.4 | 115 | 1.2 | 441 | 4.7 |
| Women | 1080 | 318 | 29.4 | 285 | 26.4 | 309 | 28.6 | 40 | 3.7 | 124 | 11.5 |
| Physicists/Astronomers | | | | | | | | | | | |
| Men | 7638 | 4441 | 58.1 | 1778 | 23.3 | 968 | 12.7 | 65 | 0.9 | 341 | 4.5 |
| Women | 241 | 80 | 33.2 | 50 | 20.7 | 81 | 33.6 | 4 | 1.7 | 21 | 8.7 |
| Mathematicians | | | | | | | | | | | |
| Men | 9063 | 4771 | 52.6 | 2309 | 25.5 | 1637 | 18.1 | 111 | 1.2 | 207 | 2.3 |
| Women | 896 | 224 | 25.0 | 290 | 32.4 | 326 | 36.4 | 29 | 3.2 | 20 | 2.2 |
| Statisticians | | | | | | | | | | | |
| Men | 1460 | 687 | 47.1 | 470 | 32.2 | 270 | 18.5 | ** | | ** | |
| Women | 148 | 20 | 13.5 | 67 | 45.3 | 59 | 39.9 | 2 | 1.4 | ** | |
| Computer/Info Specialist | | | | | | | | | | | |
| Men | 3048 | 974 | 31.9 | 1210 | 39.7 | 907 | 29.8 | 42 | 1.4 | 210 | 6.9 |
| Women | 277 | 35 | 12.6 | 66 | 23.8 | 134 | 48.4 | 4 | 1.4 | 34 | 12.3 |
| Earth Scientists | | | | | | | | | | | |
| Men | 3401 | 1868 | 55.5 | 808 | 23.8 | 617 | 18.1 | 12 | 0.4 | 62 | 1.8 |
| Women | 219 | 28 | 12.8 | 55 | 25.1 | 105 | 47.9 | 14 | 6.4 | 17 | 7.8 |
| Oceanographers | | | | | | | | | | | |
| Men | 482 | 141 | 29.3 | 191 | 39.6 | 122 | 25.3 | ** | | 28 | 5.8 |
| Women | 46 | 2 | 4.3 | 30 | 65.2 | 12 | 26.1 | ** | | 2 | 4.3 |
| Atmospheric Scientists | | | | | | | | | | | |
| Men | 382 | 191 | 50.0 | 124 | 32.5 | 59 | 15.4 | ** | | 8 | 2.1 |
| Women | 20 | 1 | 5.0 | 19 | 95.0 | ** | | ** | | ** | |
| Biological Scientists | | | | | | | | | | | |
| Men | 18865 | 8652 | 45.9 | 5826 | 30.9 | 3328 | 17.6 | 108 | 0.6 | 951 | 5.0 |
| Women | 4551 | 938 | 20.6 | 1484 | 32.7 | 1365 | 30.0 | 173 | 3.8 | 591 | 13.0 |
| Agricultural Scientists | | | | | | | | | | | |
| Men | 4208 | 2156 | 51.2 | 1145 | 27.2 | 670 | 15.9 | 9 | 0.2 | 228 | 5.4 |
| Women | 237 | 35 | 14.8 | 43 | 18.1 | 122 | 51.5 | 17 | 7.2 | 20 | 8.4 |
| Medical Scientists | | | | | | | | | | | |
| Men | 5750 | 2514 | 43.7 | 1643 | 28.6 | 1101 | 19.1 | 67 | 1.2 | 325 | 5.7 |
| Women | 2747 | 386 | 14.1 | 892 | 32.5 | 953 | 34.7 | 93 | 3.4 | 423 | 15.4 |
| Psychologists | | | | | | | | | | | |
| Men | 10707 | 5685 | 46.5 | 3562 | 30.4 | 1805 | 15.4 | 125 | 0.4 | 497 | 4.2 |
| Women | 4720 | 944 | 20.4 | 2260 | 49.4 | 1527 | 33.4 | 147 | 3.2 | 242 | 5.2 |
| Economists | | | | | | | | | | | |
| Men | 8949 | 4238 | 47.4 | 2454 | 27.4 | 1921 | 21.5 | 18 | 0.2 | 42 | 0.5 |
| Women | 1813 | 223 | 27.4 | 771 | 38.4 | 376 | 37.4 | 10 | 0.5 | 83 | 4.6 |
| Sociologists/Anthro. | | | | | | | | | | | |
| Men | 6295 | 2924 | 46.5 | 2072 | 32.9 | 453 | 14.2 | 11 | 0.2 | 35 | 0.6 |
| Women | 2415 | 478 | 19.8 | 828 | 34.3 | 424 | 37.9 | 14 | 0.6 | 73 | 3.0 |
| Other Social Scientists | | | | | | | | | | | |
| Men | 15347 | 6849 | 44.6 | 4924 | 32.1 | 2754 | 18.0 | 154 | 1.0 | 485 | 3.2 |
| Women | 3704 | 545 | 14.4 | 1069 | 32.2 | 1427 | 42.2 | 42 | 1.2 | 102 | 2.8 |
| Engineers | | | | | | | | | | | |
| Men | 15445 | 7744 | 50.8 | 3948 | 25.7 | 2389 | 14.4 | ** | | 165 | 1.4 |
| Women | 707 | 61 | 9.2 | 176 | 24.9 | 151 | 21.0 | 4 | 0.6 | 27 | 3.8 |

*Includes the "No Report" category. ** No cases reported.

SOURCE: Humanities Doctorates in the United States, 1985 Profile, National Research Council

## TABLE 5-2

ACADEMIC POSITION OF HUMANITIES PH.D.S BY YEAR OF PH.D., FIELD OF PH.D. AND SEX, 1985

| Year of Ph.D. and Academic Position | Field of Doctorate | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | All Fields | | Eng/Amer Lang and Lit | | History | | Other Lang and Lit | | Other Humanities | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Total, 1942-1984 Ph.D.s (N) | 47,000 | 17,900 | 11,700 | 5,800 | 12,600 | 2,200 | 7,900 | 5,000 | 14,800 | 4,900 |
| Faculty | 97.2 | 93.6 | 97.7 | 92.9 | 96.9 | 91.0 | 97.7 | 95.9 | 96.8 | 93.3 |
| Professor | 45.3 | 23.8 | 45.5 | 27.5 | 52.5 | 29.5 | 39.0 | 20.6 | 42.3 | 20.0 |
| Associate Professor | 29.7 | 27.6 | 30.3 | 26.9 | 26.4 | 22.7 | 35.5 | 30.6 | 29.1 | 27.7 |
| Assistant Professor | 12.9 | 25.1 | 11.2 | 18.5 | 7.4 | 22.8 | 15.3 | 29.0 | 17.5 | 29.9 |
| Instructor | 2.8 | 6.3 | 2.9 | 6.3 | 3.1 | 6.2 | 2.1 | 6.6 | 2.7 | 6.2 |
| Other (inclu. Admin.) | 6.6 | 10.8 | 7.8 | 13.7 | 7.5 | 9.8 | 5.7 | 9.2 | 5.2 | 9.5 |
| Nonfaculty | 2.2 | 4.5 | 1.9 | 5.5 | 2.6 | 6.8 | 1.9 | 3.0 | 2.4 | 3.9 |
| Teaching Staff* | 0.5 | 1.0 | 1.0 | 1.3 | 0.0 | 0.8 | 0.5 | 0.9 | 0.7 | 1.1 |
| Research Staff** | 0.6 | 0.7 | 0.3 | 0.3 | 1.1 | 0.9 | 0.4 | 0.7 | 0.7 | 0.9 |
| Other | 1.1 | 2.8 | 0.7 | 3.9 | 1.5 | 5.1 | 1.0 | 1.4 | 1.0 | 1.9 |
| Postdoctoral Appointment | 0.2 | 0.6 | 0.1 | 0.2 | 0.3 | 0.1 | 0.4 | 0.4 | 0.0 | 1.4 |
| No Report | 0.4 | 1.3 | 0.4 | 1.4 | 0.2 | 2.1 | 0.0 | 0.7 | 0.7 | 1.4 |
| Total, 1979-1984 Ph.D.s (N) | 7,200 | 5,600 | 1,500 | 1,600 | 1,400 | 600 | 1,100 | 1,500 | 3,200 | 1,900 |
| Faculty | 91.7 | 92.1 | 93.7 | 90.8 | 83.8 | 87.9 | 95.3 | 96.4 | 92.8 | 91.2 |
| Professor | 6.2 | 3.2 | 2.0 | 4.8 | 7.0 | 3.3 | 3.8 | 2.2 | 8.7 | 2.7 |
| Associate Professor | 16.6 | 12.3 | 13.5 | 17.6 | 9.1 | 7.8 | 17.2 | 7.3 | 21.0 | 13.0 |
| Assistant Professor | 53.7 | 53.9 | 56.7 | 41.1 | 45.3 | 53.7 | 59.6 | 64.3 | 53.8 | 56.5 |
| Instructor | 8.3 | 9.2 | 14.9 | 6.9 | 11.3 | 13.3 | 5.4 | 10.0 | 4.9 | 9.2 |
| Other | 6.9 | 13.5 | 6.6 | 20.4 | 11.0 | 9.7 | 9.4 | 12.6 | 4.3 | 9.8 |
| Nonfaculty | 6.5 | 5.7 | 3.8 | 7.2 | 14.7 | 11.8 | 3.2 | 2.4 | 5.5 | 4.9 |
| Teaching Staff* | 1.2 | 1.6 | 3.8 | 3.3 | 0.0 | 0.0 | 1.1 | 0.5 | 0.6 | 1.6 |
| Research Staff** | 2.5 | 0.6 | 0.0 | 0.0 | 6.1 | 0.0 | 1.1 | 1.0 | 2.7 | 0.8 |
| Other | 2.8 | 3.5 | 0.0 | 3.9 | 8.6 | 11.8 | 1.0 | 0.8 | 2.2 | 2.5 |
| Postdoctoral Appointment | 0.5 | 1.1 | 0.5 | 0.2 | 0.7 | 0.0 | 1.5 | 0.5 | 0.1 | 2.5 |
| No Report | 1.3 | 1.2 | 2.0 | 1.8 | 0.9 | 0.3 | 0.0 | 0.6 | 1.6 | 1.4 |

*Includes nonfaculty staff members whose primary work activity is teaching.

**Includes nonfaculty staff members whose primary work activity is basic research, applied research, development, or design.

NOTE: Other Languages & Literature = Classical Languages and Literature and Modern Languages and Literature. Other Humanities = Art History, Music, Speech/Theater, Philosophy, and "Other Humanities. "Ph.D.s who did not report their academic position were excluded from the percentage base for longitudinal comparison.

SOURCE: Characteristics of Doctoral Scientists and Engineers, 1985, National Science Foundation

## TABLE 5-3

### DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE COLLEGE OR UNIVERSITY TEACHERS BY FIELD, RANK AND SEX, 1985

| | Total(1) | | | Professor | | | Asso. Prof. | | | Asst. Prof. | | | Instructor | | | Administrator | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | W | %W | No. | W | %W | No. | W | %W | No. | W | %W | No. | W | %W | No. | W | %W |
| All Fields | 143360 | 21254 | 14.8 | 64103 | 4308 | 6.7 | 41265 | 6796 | 16.5 | 29110 | 7672 | 26.4 | 1453 | 599 | 41.2 | 1463 | 156 | 10.7 |
| Scientists | 127583 | 20922 | 16.4 | 56228 | 4277 | 7.6 | 37181 | 6680 | 18.0 | 25965 | 7516 | 28.9 | 1451 | 597 | 41.1 | 1364 | 152 | 11.1 |
| Chemists | 10870 | 1080 | 9.9 | 6156 | 318 | 5.2 | 2272 | 285 | 12.5 | 1620 | 309 | 19.1 | 155 | 40 | 25.8 | 111 | 7 | 6.3 |
| Physicists/Astronomers | 7879 | 241 | 3.1 | 4521 | 80 | 1.8 | 1828 | 50 | 2.7 | 1049 | 81 | 7.7 | 74 | 9 | 12.2 | 67 | 3 | 4.5 |
| Mathematical Scientists | 11567 | 1044 | 9.0 | 5702 | 244 | 4.3 | 3136 | 357 | 11.4 | 2292 | 385 | 16.8 | 142 | 31 | 21.8 | 82 | 2 | 2.4 |
| Computer/Information Sp. | 3619 | 277 | 7.7 | 1009 | 35 | 3.5 | 1276 | 66 | 5.2 | 1039 | 136 | 13.1 | 46 | 4 | 8.7 | 80 | * | 0.0 |
| Earth Scientists | 3620 | 219 | 6.0 | 1916 | 28 | 1.5 | 863 | 55 | 6.4 | 722 | 105 | 14.5 | 26 | 14 | 53.8 | 42 | * | 0.0 |
| Oceanographers | 528 | 46 | 8.7 | 143 | 2 | 1.4 | 221 | 30 | 13.6 | 134 | 12 | 9.0 | * | * | | 8 | * | 0.0 |
| Atmospheric Scientists | 402 | 20 | 5.0 | 192 | 1 | 0.5 | 143 | 19 | 13.3 | 59 | * | 0.0 | * | * | | * | * | |
| Biological Scientists | 23416 | 4551 | 19.4 | 9590 | 938 | 9.8 | 7315 | 1489 | 20.4 | 4691 | 1363 | 29.1 | 281 | 173 | 61.6 | 234 | 36 | 15.4 |
| Agricultural Scientists | 4445 | 237 | 5.3 | 2191 | 35 | 1.6 | 1188 | 43 | 3.6 | 792 | 122 | 15.4 | 22 | 17 | 77.3 | 26 | * | 0.0 |
| Medical Scientists | 8095 | 2343 | 28.9 | 2902 | 386 | 13.3 | 2535 | 892 | 35.2 | 1954 | 853 | 43.7 | 120 | 53 | 44.2 | 118 | 9 | 7.6 |
| Psychologists | 16029 | 4302 | 26.8 | 6649 | 964 | 14.5 | 4826 | 1266 | 26.2 | 3328 | 1523 | 45.8 | 252 | 147 | 58.3 | 194 | 38 | 19.6 |
| Economists | 9762 | 813 | 8.3 | 4461 | 223 | 5.0 | 2685 | 231 | 8.6 | 2197 | 276 | 12.6 | 48 | 30 | 62.5 | 30 | 4 | 13.3 |
| Sociologists/Anthro. | 8690 | 2435 | 28.0 | 3402 | 478 | 14.1 | 2900 | 828 | 28.6 | 1877 | 924 | 49.2 | 74 | 19 | 25.7 | 108 | 7 | 6.5 |
| Other Social Scientists | 18661 | 3314 | 17.8 | 7394 | 545 | 7.4 | 5993 | 1069 | 17.8 | 4211 | 1427 | 33.9 | 211 | 60 | 28.4 | 264 | 46 | 17.4 |
| Engineers | 15777 | 332 | 2.1 | 7875 | 31 | 0.4 | 4084 | 116 | 2.8 | 3145 | 156 | 5.0 | 2 | 2 | 100.0 | 99 | 4 | 4.0 |

(1) Includes "Other" and "No Report". *No cases reported.

SOURCE: National Research Council, Special tabulation from 1985 Survey of Doctoral Scientists and Engineers, unpublished

## TABLE 5-4

TENURE STATUS OF ACADEMICALLY EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS, BY FIELD AND SEX, 1985

| | Number | | | % Tenured | | % In Tenure Track | | % Not In Tenure Tr. | |
|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | %W | Men | Women | Men | Women | Men | Women |
| All S/E Fields | 171402 | 32287 | 15.9 | 62.9 | 37.7 | 15.9 | 23.4 | 13.9 | 31.0 |
| Chemists | 14768 | 1725 | 10.5 | 63.0 | 36.9 | 11.1 | 14.7 | 14.6 | 39.5 |
| Physicists/Astronomers | 14376 | 512 | 3.4 | 55.2 | 34.0 | 8.0 | 15.6 | 19.3 | 32.6 |
| Mathematical Scientists | 12914 | 1287 | 9.1 | 72.0 | 53.8 | 15.1 | 26.3 | 7.3 | 15.7 |
| Computer/Information Sp. | 1265 | 157 | 11.0 | 33.3 | 34.4 | 47.7 | 43.3 | 13.6 | 17.8 |
| Earth/Envir Scientists | 5684 | 443 | 7.2 | 59.1 | 28.4 | 16.5 | 27.5 | 18.3 | 37.0 |
| Biological Scientists | 33731 | 9427 | 21.8 | 61.0 | 30.1 | 15.1 | 18.1 | 18.4 | 41.3 |
| Agricultural Scientists | 10186 | 571 | 5.3 | 63.4 | 25.9 | 20.0 | 37.5 | 11.7 | 30.6 |
| Medical Scientists | 6365 | 2560 | 28.7 | 55.5 | 37.5 | 20.5 | 33.2 | 17.9 | 22.1 |
| Psychologists | 16210 | 7081 | 30.4 | 62.3 | 37.3 | 13.8 | 22.6 | 17.6 | 30.9 |
| Social Scientists | 34711 | 8120 | 19.0 | 68.2 | 46.5 | 16.9 | 26.2 | 9.7 | 23.0 |
| Engineers | 21192 | 404 | 1.9 | 62.4 | 25.7 | 21.1 | 48.5 | 9.5 | 17.8 |

(1) Includes "Other" and "No Report".

SOURCE: Humanities Doctorates in the United States, 1985 Profile, National Research Council

## TABLE 5-5

TENURE STATUS OF ACADEMICALLY EMPLOYED PH.D.S BY FIELD OF PH.D. AND SEX, 1985

| Age and Tenure | Field of Doctorate | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | All Fields | | Eng/Amer Lang and Lit | | History | | Other Lang and Lit | | Other Humanities | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Total Employed (N) | 47,000 | 17,900 | 11,700 | 5,800 | 12,600 | 2,200 | 7,900 | 5,000 | 14,800 | 4,900 |
| Tenured | 75.0 | 51.0 | 78.1 | 53.9 | 76.0 | 51.8 | 77.3 | 51.6 | 70.6 | 46.7 |
| Not Tenured | 21.4 | 44.9 | 18.1 | 42.1 | 20.6 | 44.7 | 21.1 | 45.3 | 24.8 | 47.9 |
| Tenure Track | 11.3 | 20.0 | 9.2 | 16.2 | 8.4 | 16.9 | 12.3 | 22.5 | 15.1 | 23.6 |
| Non-Tenure Track | 9.5 | 24.1 | 8.4 | 25.1 | 12.1 | 27.2 | 8.2 | 22.2 | 9.0 | 23.5 |
| Age 35 and Under (N) | 3,300 | 2,000 | 900 | 400 | 600 | 200 | 500 | 600 | 1,300 | 800 |
| Tenured | 13.8 | 6.2 | 16.7 | 0.9 | 4.2 | 9.6 | 13.4 | 10.9 | 16.0 | 4.6 |
| Not Tenured | 83.8 | 90.4 | 80.5 | 92.9 | 95.8 | 90.4 | 85.6 | 87.4 | 80.3 | 91.3 |
| Tenure Track | 55.5 | 57.1 | 61.9 | 44.9 | 36.3 | 57.4 | 53.0 | 56.7 | 60.1 | 64.4 |
| Non-Tenure Track | 27.9 | 32.8 | 18.6 | 48.0 | 59.5 | 32.9 | 29.7 | 29.4 | 20.3 | 26.3 |
| Age 36 to 45 (N) | 16,700 | 7,500 | 4,300 | 2,200 | 4,200 | 900 | 2,800 | 2,200 | 5,400 | 2,200 |
| Tenured | 67.1 | 46.8 | 79.7 | 54.9 | 64.8 | 42.1 | 68.6 | 43.0 | 57.8 | 44.4 |
| Not Tenured | 29.3 | 48.9 | 17.4 | 40.8 | 31.3 | 53.0 | 29.7 | 55.0 | 37.0 | 49.3 |
| Tenure Track | 16.6 | 22.0 | 10.7 | 17.4 | 14.3 | 17.4 | 18.4 | 28.0 | 22.2 | 22.7 |
| Non-Tenure Track | 12.0 | 26.2 | 6.7 | 23.2 | 16.7 | 34.1 | 11.3 | 26.1 | 13.0 | 26.0 |
| Age 46 and Older (N) | 27,000 | 8,300 | 6,400 | 3,200 | 7,900 | 1,000 | 4,600 | 2,200 | 8,100 | 1,900 |
| Tenured | 87.5 | 65.7 | 85.8 | 60.8 | 86.9 | 69.9 | 89.7 | 70.4 | 88.3 | 65.9 |
| Not Tenured | 8.8 | 30.2 | 9.6 | 35.8 | 9.6 | 27.0 | 8.9 | 25.0 | 7.4 | 29.0 |
| Tenure Track | 2.6 | 9.2 | 0.7 | 11.2 | 3.3 | 6.9 | 4.1 | 8.3 | 2.8 | 8.3 |
| Non-Tenure Track | 5.8 | 20.2 | 8.0 | 23.2 | 6.3 | 20.1 | 4.0 | 16.5 | 4.4 | 19.7 |

NOTE: Other Languages & Literature = Classical Languages and Literature and Modern Languages and Literature. Other Humanities = Art History, Music, Speech/Theater, Philosophy, and "Other Humanities." Percentages for those not reporting tenure status are not included in this table; therefore totals may not add to 100 percent.

SOURCE: National Center for Education Statistics, Preliminary Releases and Unpublished Data

## TABLE 5-6

PERCENT OF FACULTY MEMBERS WITH TENURE, SELECTED YEARS, 1977-78 - 1984-85

| | ALL INSTITUTIONS | | | | UNIVERSITIES | | | | OTHER FOUR-YEAR INSTITUTIONS | | | | TWO-YEAR INSTITUTIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1977-78 | 1981-82 | 1982-83 | 1984-85 | 1977-78 | 1981-82 | 1982-83 | 1984-85 | 1977-78 | 1981-82 | 1982-83 | 1984-85 | 1977-78 | 1981-82 | 1982-83 | 1984-85 |
| Professors | 95.8 | 93.3 | 95.6 | 94.0 | 96.8 | 96.1 | 96.8 | 95.0 | 94.9 | 91.4 | 94.4 | 90.8 | 97.3 | 88.3 | 95.3 | 86.4 |
| Men | 95.9 | 93.6 | 95.7 | 94.4 | 96.9 | 96.3 | 96.9 | 95.1 | 95.0 | 91.5 | 94.5 | 91.3 | 97.1 | 88.6 | 95.7 | 87.1 |
| Women | 94.8 | 91.1 | 94.3 | 91.5 | 95.2 | 94.6 | 95.1 | 94.5 | 94.3 | 90.3 | 94.0 | 87.7 | 98.1 | 87.5 | 93.9 | 84.7 |
| Assoc. Professor | 82.5 | 79.8 | 82.1 | 80.3 | 82.8 | 82.9 | 83.8 | 80.0 | 80.9 | 77.2 | 79.8 | 74.7 | 92.8 | 83.1 | 88.9 | 80.5 |
| Men | 82.7 | 80.0 | 82.2 | 80.5 | 83.1 | 82.9 | 83.8 | 80.0 | 81.2 | 77.4 | 80.0 | 75.5 | 92.8 | 83.8 | 89.5 | 81.0 |
| Women | 81.8 | 79.0 | 81.7 | 79.6 | 80.5 | 82.7 | 83.8 | 80.3 | 80.0 | 76.4 | 79.1 | 72.6 | 92.7 | 81.7 | 87.7 | 79.6 |
| Ass't. Professor | 31.0 | 26.1 | 26.8 | 24.8 | 17.6 | 14.4 | 14.6 | 31.7 | 32.1 | 27.7 | 28.4 | 22.4 | 61.6 | 53.4 | 58.4 | 50.3 |
| Men | 29.7 | 24.9 | 26.5 | 23.3 | 16.1 | 12.9 | 13.2 | 30.8 | 31.8 | 27.1 | 27.8 | 22.7 | 63.4 | 55.4 | 60.0 | 51.7 |
| Women | 33.7 | 28.4 | 29.2 | 27.2 | 21.3 | 17.8 | 17.8 | 33.1 | 33.8 | 28.7 | 29.4 | 22.1 | 58.7 | 50.6 | 56.0 | 48.5 |
| Instructors | 10.0 | 8.2 | 9.0 | 13.3 | 5.2 | 4.8 | 4.9 | 8.4 | 8.5 | 6.3 | 6.7 | 3.0 | 19.4 | 16.4 | 19.9 | 27.9 |
| Men | 10.4 | 8.6 | 9.7 | 15.7 | 5.0 | 4.7 | 4.8 | 9.1 | 8.7 | 6.3 | 7.0 | 3.2 | 20.7 | 18.5 | 21.8 | 32.0 |
| Women | 9.6 | 7.7 | 8.5 | 10.9 | 5.4 | 4.9 | 4.9 | 7.8 | 8.3 | 6.3 | 6.5 | 2.9 | 18.0 | 14.4 | 18.1 | 23.1 |
| Lecturers | 3.0 | 10.6 | 11.0 | 10.6 | 4.5 | 3.6 | 3.6 | 16.0 | 0.8 | 15.4 | 16.3 | 5.3 | 3.3 | 30.0 | 32.3 | 38.5 |
| Men | 3.8 | 10.6 | 11.2 | 11.2 | 5.2 | 4.7 | 4.4 | 15.0 | 1.3 | 14.6 | 16.4 | 5.4 | 6.7 | 30.4 | 32.4 | 38.7 |
| Women | 2.0 | 10.6 | 10.8 | 9.9 | 3.4 | 2.3 | 2.7 | 17.2 | 0.2 | 16.4 | 16.2 | 5.2 | 1.1 | 29.6 | 32.1 | 38.3 |
| No Academic Rank | 73.4 | 47.4 | 77.2 | 45.8 | 1.3 | 0.9 | 0.7 | 21.8 | 30.9 | 14.5 | 32.7 | 21.9 | 75.9 | 50.4 | 81.2 | 49.3 |
| Men | 77.0 | 50.3 | 80.1 | 48.7 | 1.9 | 1.6 | 1.1 | 23.7 | 33.3 | 15.7 | 36.6 | 23.7 | 79.7 | 53.5 | 84.0 | 52.6 |
| Women | 66.2 | 42.4 | 71.9 | 41.1 | 0.0 | 0.0 | 0.0 | 18.9 | 28.4 | 12.1 | 25.8 | 17.7 | 68.4 | 45.0 | 76.0 | 44.0 |
| All Academic Ranks | 62.7 | 59.1 | 65.4 | 60.6 | 62.4 | 64.2 | 65.5 | 65.6 | 59.9 | 58.2 | 61.6 | 52.8 | 70.8 | 54.4 | 75.0 | 54.3 |
| Men | 67.5 | 64.6 | 70.4 | 66.1 | 67.7 | 69.7 | 70.9 | 70.8 | 64.9 | 63.4 | 67.3 | 59.1 | 75.3 | 58.2 | 78.9 | 58.0 |
| Women | 48.2 | 44.1 | 51.0 | 45.9 | 38.3 | 41.0 | 42.9 | 51.7 | 45.2 | 43.1 | 46.4 | 38.5 | 62.4 | 47.9 | 68.2 | 48.3 |

Note: 1977-78 figures based on a 67% response

SOURCE: National Center for Education Statistics, Unpublished

TABLE 5-7

**NUMBER OF FULL-TIME INSTRUCTIONAL FACULTY AND PERCENT TENURED BY SEX, ACADEMIC RANK, TYPE AND CONTROL OF INSTITUTION, 1984-85**

| ACADEMIC RANK | Number of Faculty Members | | | Percent with Tenure | | |
|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women |
| **Public PhD Universities** | | | | | | |
| Professors | 40,329 | 37,488 | 2,841 | 97.2 | 97.3 | 96.3 |
| Associate Professors | 28,862 | 23,273 | 5,589 | 88.0 | 87.9 | 88.3 |
| Assistant Professors | 23,220 | 15,649 | 7,571 | 14.6 | 12.5 | 19.0 |
| Instructors | 4,190 | 1,826 | 2,364 | 5.8 | 5.8 | 5.9 |
| Lecturers | 3,016 | 1,591 | 1,425 | 5.2 | 6.9 | 3.4 |
| No Academic Rank | 747 | 442 | 305 | 5.2 | 6.9 | 3.4 |
| All Ranks Combined | 100,364 | 80,269 | 20,095 | 68.2 | 73.6 | 46.3 |
| **Private PhD Universities** | | | | | | |
| Professors | 12,564 | 11,674 | 890 | 97.1 | 97.2 | 95.7 |
| Associate Professors | 7,815 | 6,130 | 1,685 | 76.6 | 76.7 | 76.3 |
| Assistant Professors | 7,349 | 5,047 | 2,302 | 7.0 | 6.5 | 8.2 |
| Instructors | 987 | 508 | 479 | 2.0 | 2.8 | 1.3 |
| Lecturers | 676 | 336 | 340 | 0.6 | 0.3 | 0.9 |
| No Academic Rank | 151 | 94 | 57 | 0.0 | 0.0 | 0.0 |
| All Ranks Combined | 29,542 | 23,789 | 5,753 | 63.4 | 68.9 | 40.6 |
| **Public 4-Yr Institutions** | | | | | | |
| Professors | 3,280 | 2,797 | 483 | 95.2 | 95.2 | 95.4 |
| Associate Professors | 4,095 | 3,145 | 950 | 81.8 | 80.7 | 85.5 |
| Assistant Professors | 4,392 | 2,765 | 1,627 | 34.7 | 35.0 | 34.3 |
| Instructors | 1,456 | 733 | 723 | 7.6 | 7.0 | 8.2 |
| Lecturers | 361 | 180 | 181 | 6.6 | 6.7 | 6.6 |
| No Academic Rank | 946 | 662 | 284 | 21.8 | 24.0 | 16.5 |
| All Ranks Combined | 34,733 | 23,903 | 10,830 | 50.2 | 57.0 | 35.1 |
| **Private 4-Yr Institutions** | | | | | | |
| Professors | 9,311 | 7,945 | 1,366 | 89.2 | 89.9 | 85.0 |
| Associate Professors | 9,658 | 7,053 | 2,605 | 71.7 | 73.1 | 67.9 |
| Assistant Professors | 11,077 | 6,510 | 4,567 | 17.5 | 17.4 | 17.7 |
| Instructors | 3,570 | 1,652 | 1,918 | 1.2 | 1.5 | 0.9 |
| Lecturers | 171 | 81 | 90 | 2.3 | 2.5 | 2.2 |
| No Academic Rank | 946 | 662 | 284 | 21.8 | 24.0 | 16.5 |
| All Ranks Combined | 34,733 | 23,903 | 10,830 | 50.2 | 57.0 | 35.1 |
| **Public 2-Yr Institutions** | | | | | | |
| Professors | 7,943 | 5,903 | 2,040 | 88.5 | 88.9 | 87.5 |
| Associate Professors | 9,806 | 6,414 | 3,392 | 83.4 | 84.0 | 82.4 |
| Assistant Professors | 9,701 | 5,534 | 4,167 | 53.5 | 54.6 | 52.1 |
| Instructors | 8,843 | 4,814 | 4,029 | 30.1 | 34.2 | 25.2 |
| Lecturers | 426 | 224 | 202 | 43.4 | 44.2 | 42.6 |
| No Academic Rank | 46,031 | 28,724 | 17,307 | 51.3 | 54.3 | 46.5 |
| All Ranks Combined | 82,750 | 51,613 | 31,137 | 56.6 | 60.0 | 51.0 |
| **Private 2-Yr Institutions** | | | | | | |
| Professors | 455 | 312 | 143 | 49.9 | 52.6 | 44.1 |
| Associate Professors | 619 | 407 | 212 | 34.2 | 34.4 | 34.0 |
| Assistant Professors | 848 | 422 | 426 | 13.7 | 14.0 | 13.4 |
| Instructors | 841 | 401 | 440 | 5.1 | 6.5 | 3.9 |
| Lecturers | 70 | 32 | 28 | 3.3 | 0.0 | 7.1 |
| No Academic Rank | 2,562 | 1,333 | 1,193 | 13.7 | 16.4 | 10.6 |
| All Ranks Combined | 5,349 | 2,907 | 2,442 | 17.7 | 20.9 | 13.8 |
| **All Institutions, Public & Private*** | | | | | | |
| Professors | 114,675 | 101,591 | 13,084 | 94.0 | 94.3 | 91.5 |
| Associate Professors | 96,455 | 73,753 | 22,702 | 80.3 | 80.5 | 79.6 |
| Assistant Professors | 88,966 | 55,764 | 33,202 | 24.8 | 23.3 | 27.2 |
| Instructors | 30,005 | 14,991 | 15,014 | 13.3 | 15.7 | 10.9 |
| Lecturers | 6,929 | 3,652 | 3,277 | 10.6 | 11.2 | 9.9 |
| No Academic Rank | 53,675 | 33,413 | 20,262 | 45.8 | 48.7 | 41.1 |
| All Ranks Combined | 390,705 | 283,164 | 107,541 | 60.6 | 66.1 | 45.9 |

*Includes comprehensive institutions and specialized institutions.

SOURCE: Digest of Education Statistics 1985-86 and 1987, U. S. Dept. of Education Office of Educational Research and Improvement

## TABLE 5-8

## FULL-TIME INSTRUCTIONAL FACULTY IN INSTITUTIONS OF HIGHER EDUCATION, BY RACE/ETHNICITY, ACADEMIC RANK AND SEX, FALL 1983

| Academic rank and sex | Racial/ethnic group | | | | | |
|---|---|---|---|---|---|---|
| | Total | White non-Hispanic | Black non-Hispanic | Hispanic | Asian or Pacific Islander | American Indian/ Alaskan Native |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Men and women, all ranks** | **470,673** | **425,691** | **19,451** | **7,356** | **16,868** | **1,307** |
| Professors | 128,142 | 119,219 | 2,857 | 1,369 | 4,466 | 231 |
| Associate professors | 111,887 | 102,246 | 3,969 | 1,604 | 3,784 | 284 |
| Assistant professors | 113,330 | 100,176 | 5,847 | 2,008 | 5,002 | 297 |
| Instructors | 82,211 | 73,206 | 5,117 | 1,793 | 1,741 | 354 |
| Lecturers | 9,480 | 8,274 | 618 | 220 | 330 | 38 |
| Other faculty | 25,623 | 22,570 | 1,043 | 362 | 1,545 | 103 |
| **Men, all ranks** | **330,930** | **313,424** | **10,540** | **5,172** | **13,692** | **952** |
| Professors | 103,380 | 106,554 | 2,034 | 1,137 | 4,151 | 196 |
| Associate professors | 83,589 | 80,100 | 2,461 | 1,210 | 3,176 | 229 |
| Assistant professors | 73,810 | 65,692 | 2,964 | 1,389 | 3,905 | 216 |
| Instructors | 46,468 | 42,595 | 2,314 | 1,075 | 1,055 | 219 |
| Lecturers | 4,744 | 4,584 | 301 | 110 | 201 | 23 |
| Other faculty | 18,930 | 13,899 | 466 | 251 | 1,204 | 69 |
| **Women, all ranks** | **126,893** | **112,267** | **8,911** | **2,184** | **3,176** | **355** |
| Professors | 14,070 | 12,665 | 823 | 232 | 315 | 35 |
| Associate professors | 24,711 | 22,146 | 1,508 | 394 | 608 | 55 |
| Assistant professors | 39,164 | 34,484 | 2,883 | 619 | 1,097 | 81 |
| Instructors | 34,953 | 30,611 | 2,803 | 718 | 686 | 135 |
| Lecturers | 4,261 | 3,690 | 317 | 110 | 129 | 15 |
| Other faculty | 9,734 | 8,671 | 577 | 111 | 341 | 34 |

## FULL TIME INSTRUCTIONAL FACULTY BY RACE/ETHNICITY, RANK AND SEX, FALL 1981

| Academic rank and sex | Total | Racial/ethnic group | | | | |
|---|---|---|---|---|---|---|
| | | White non-Hispanic | Black non-Hispanic | Hispanic | Asian or Pacific Islander | American Indian/ Alaskan Native |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Men and Women:** | | | | | | |
| All ranks | 451,558 | 410,345 | 18,540 | 6,899 | 14,489 | 1,285 |
| Professors | 115,210 | 107,690 | 2,396 | 1,166 | 3,759 | 199 |
| Associate professors | 105,584 | 96,959 | 3,576 | 1,438 | 3,262 | 349 |
| Assistant professors | 110,974 | 99,154 | 5,419 | 1,771 | 4,349 | 281 |
| Instructors | 81,225 | 72,438 | 5,062 | 1,883 | 1,538 | 304 |
| Lecturers | 8,359 | 7,486 | 431 | 143 | 273 | 26 |
| Other faculty | 30,206 | 26,618 | 1,656 | 498 | 1,308 | 126 |
| **Men:** | | | | | | |
| All ranks | 330,930 | 303,543 | 10,000 | 4,844 | 11,725 | 818 |
| Professors | 103,380 | 97,017 | 1,716 | 977 | 3,507 | 163 |
| Associate professors | 83,589 | 77,268 | 2,290 | 1,109 | 2,749 | 173 |
| Assistant professors | 73,810 | 66,270 | 2,749 | 1,204 | 3,390 | 197 |
| Instructors | 46,468 | 41,922 | 2,255 | 1,173 | 928 | 190 |
| Lecturers | 4,744 | 4,285 | 213 | 72 | 159 | 15 |
| Other faculty | 18,939 | 16,781 | 777 | 309 | 992 | 80 |
| **Women:** | | | | | | |
| All ranks | 120,628 | 106,802 | 8,540 | 2,055 | 2,764 | 467 |
| Professors | 11,830 | 10,673 | 680 | 189 | 252 | 36 |
| Associate professors | 21,995 | 19,691 | 1,286 | 329 | 513 | 176 |
| Assistant professors | 37,164 | 32,884 | 2,670 | 567 | 959 | 84 |
| Instructors | 34,757 | 30,516 | 2,807 | 710 | 610 | 114 |
| Lecturers | 3,615 | 3,201 | 218 | 71 | 114 | 11 |
| Other faculty | 11,267 | 9,837 | 879 | 189 | 316 | 46 |

SOURCE: Academic Science: Scientists and Engineers, January 1981, Detailed Statistical Tables, NSF 82-305,...January 1982, NSF 83-311, ...January 1984, NSF 85-316, and Summary Tables, January 1985, unpublished, National Science Foundation

## TABLE 5-9

NUMBER AND PERCENT OF SCIENTISTS AND ENGINEERS EMPLOYED FULL TIME IN COLLEGES AND UNIVERSITIES BY FIELD OF EMPLOYMENT AND SEX, SELECTED YEARS, JANUARY 1974 - 1985

| FIELD | 1974 | | | 1978 | | | 1980 | | | 1982 | | | 1984 | | | 1985 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| **ENGINEERS** | 22,764 | 339 | 1.5 | 24,666 | 598 | 2.4 | 26,472 | 715 | 2.7 | 28,049 | 875 | 3.1 | 29,435 | 1,109 | 3.8 | 30,078 | 1,253 | 4.2 |
| Aero. & Astro. | 1,023 | 22 | 2.1 | 964 | 18 | 1.9 | 1,144 | 27 | 2.4 | 1,083 | 21 | 1.9 | 1,138 | 23 | 2.0 | 1,212 | 23 | 1.9 |
| Chemical | 1,522 | 22 | 1.4 | 1,725 | 33 | 1.9 | 1,886 | 59 | 3.1 | 1,911 | 96 | 5.0 | 2,043 | 113 | 5.5 | 2,159 | 125 | 5.8 |
| Civil | 3,759 | 61 | 1.6 | 4,240 | 128 | 3.0 | 4,325 | 118 | 2.7 | 4,736 | 166 | 3.5 | 4,884 | 208 | 4.3 | 5,084 | 250 | 4.9 |
| Electrical | 5,404 | 57 | 1.1 | 5,593 | 91 | 1.6 | 6,374 | 114 | 1.8 | 6,811 | 136 | 2.0 | 7,305 | 194 | 2.7 | 7,742 | 239 | 3.1 |
| Mechanical | 4,255 | 33 | 0.8 | 4,523 | 61 | 1.3 | 4,817 | 92 | 1.9 | 5,094 | 98 | 1.9 | 5,411 | 98 | 1.8 | 5,543 | 112 | 2.0 |
| Other | 6,801 | 144 | 2.1 | 7,612 | 267 | 3.5 | 7,926 | 303 | 3.8 | 8,414 | 358 | 4.3 | 8,656 | 475 | 5.5 | 8,338 | 504 | 6.0 |
| **ALL SCIENCES** | † | † | † | 217,504 | 38,362 | 17.6 | 228,518 | 43,502 | 19.0 | 240,564 | 50,076 | 20.8 | 252,126 | 56,197 | 22.3 | 257,516 | 59,458 | 23.1 |
| **PHYSICAL SCIENTISTS** | 26,849 | 1,939 | 7.2 | 27,902 | 2,451 | 8.8 | 27,993 | 2,491 | 8.9 | 28,505 | 2,668 | 9.4 | 29,030 | 2,887 | 9.9 | 29,458 | 2,970 | 10.1 |
| Chemists | 14,075 | 1,385 | 9.8 | 14,736 | 1,724 | 11.7 | 14,330 | 1,779 | 12.4 | 14,800 | 1,898 | 12.8 | 15,133 | 2,017 | 13.3 | 15,076 | 2,098 | 13.9 |
| Physicists | 10,870 | 395 | 3.6 | 11,254 | 483 | 4.3 | 11,323 | 492 | 4.3 | 11,154 | 511 | 4.6 | 11,531 | 580 | 5.0 | 11,888 | 613 | 5.2 |
| Astronomers | † | † | - | † | † | - | 818 | 68 | 8.3 | 1,060 | 81 | 7.6 | 952 | 71 | 7.5 | 1,047 | 82 | 7.8 |
| Other | 1,904 | 159 | 8.4 | 1,912 | 244 | 12.8 | 1,522 | 152 | 10.0 | 1,491 | 178 | 11.9 | 1,414 | 219 | 15.5 | 1,448 | 178 | 12.3 |
| **ENVIRONMENTAL SCIENTISTS** | 6,563 | 327 | 5.0 | 8,181 | 569 | 7.0 | 8,333 | 660 | 7.9 | 8,568 | 809 | 9.4 | 8,933 | 836 | 9.4 | 8,975 | 892 | 9.9 |
| Atmospheric Scientists | 571 | 39 | 6.8 | 821 | 35 | 4.3 | 793 | 44 | 5.5 | 761 | 50 | 6.6 | 805 | 54 | 6.7 | 857 | 59 | 6.9 |
| Earth Scientists | 4,957 | 229 | 4.6 | 5,963 | 411 | 6.9 | 5,554 | 398 | 7.2 | 5,670 | 456 | 8.0 | 5,713 | 452 | 7.9 | 5,674 | 461 | 8.1 |
| Oceanographers | 1,035 | 59 | 5.7 | 1,397 | 123 | 8.8 | 1,385 | 127 | 9.2 | 1,394 | 199 | 14.3 | 1,558 | 241 | 15.7 | 1,519 | 242 | 15.9 |
| Other | † | † | - | † | † | - | 601 | 91 | 15.1 | 743 | 104 | 14.0 | 877 | 89 | 10.2 | 925 | 130 | 14.1 |
| **MATH/COMPUTER SCIENTISTS** | 22,260 | 2,925 | 13.1 | 24,349 | 3,475 | 14.3 | 26,030 | 4,085 | 15.7 | 28,322 | 4,861 | 17.2 | 31,940 | 5,968 | 18.7 | 32,979 | 6,380 | 19.3 |
| Mathematicians | 18,532 | 2,479 | 13.4 | 19,564 | 2,915 | 14.9 | 19,914 | 3,176 | 15.9 | 20,559 | 3,518 | 17.1 | 21,407 | 3,891 | 18.2 | 21,773 | 4,039 | 18.6 |
| Computer Scientists* | 3,728 | 446 | 12.0 | 4,785 | 560 | 11.7 | 6,116 | 909 | 14.9 | 7,763 | 1,343 | 17.3 | 10,533 | 2,077 | 19.7 | 11,206 | 2,341 | 20.9 |
| **LIFE SCIENTISTS** | 88,801 | 18,045 | 20.3 | 97,726 | 19,950 | 20.4 | 108,155 | 24,101 | 22.3 | 115,214 | 28,661 | 24.9 | 122,689 | 33,925 | 27.7 | 127,017 | 36,063 | 28.4 |
| Agricultural Scientists | 12,785 | 1,550 | 12.1 | 13,704 | 1,239 | 9.0 | 14,440 | 1,327 | 9.2 | 14,716 | 1,477 | 10.0 | 15,572 | 1,808 | 11.7 | 15,586 | 2,040 | 13.1 |
| Biological Scientists | 32,142 | 6,319 | 19.7 | 37,661 | 7,791 | 20.7 | 38,714 | 8,217 | 21.2 | 40,175 | 9,123 | 22.7 | 41,579 | 9,853 | 23.7 | 42,686 | 10,452 | 24.5 |
| Medical Scientists | 43,874 | 10,176 | 23.2 | 46,361 | 10,920 | 23.6 | 50,316 | 11,715 | 23.3 | 53,009 | 13,239 | 25.0 | 54,506 | 14,063 | 25.8 | 57,544 | 15,298 | 26.6 |
| Other | † | † | - | † | † | - | 4,685 | 2,842 | 60.7 | 7,314 | 4,822 | 65.9 | 11,032 | 8,201 | 74.3 | 11,200 | 8,272 | 73.9 |
| **PSYCHOLOGISTS** | 14,957 | 3,188 | 21.3 | 17,406 | 4,314 | 24.8 | 16,733 | 4,318 | 25.8 | 16,767 | 4,450 | 26.5 | 17,087 | 4,491 | 26.3 | 16,691 | 4,698 | 28.1 |
| **SOCIAL SCIENTISTS** | 36,620 | 5,768 | 15.8 | 41,836 | 7,584 | 18.1 | 41,154 | 7,829 | 19.0 | 41,638 | 8,109 | 19.5 | 42,447 | 8,090 | 19.1 | 42,396 | 8,454 | 19.9 |
| Economists | 9,830 | 788 | 8.0 | 10,854 | 968 | 8.9 | 11,092 | 1,110 | 10.0 | 11,402 | 1,198 | 10.5 | 12,122 | 1,319 | 10.9 | 11,907 | 1,355 | 11.4 |
| Sociologists | 10,048 | 2,376 | 23.6 | 9,055 | 1,079 | 11.9 | 8,767 | 1,112 | 12.7 | 9,187 | 1,283 | 14.0 | 10,208 | 2,711 | 26.6 | 10,166 | 2,703 | 26.6 |
| Political Scientists | 8,396 | 863 | 10.3 | 11,502 | 3,027 | 26.3 | 10,860 | 2,940 | 27.1 | 10,779 | 3,038 | 28.2 | 9,139 | 1,241 | 13.6 | 9,177 | 1,325 | 14.4 |
| Other Social Scientists | 8,346 | 1,741 | 20.9 | 10,425 | 2,510 | 24.1 | 10,435 | 2,667 | 25.6 | 10,270 | 2,590 | 25.2 | 10,987 | 2,819 | 25.7 | 11,146 | 3,071 | 27.6 |
| **TOTAL** | 218,407 | 32,124 | 14.7 | 242,066 | 38,941 | 16.1 | 254,870 | 44,197 | 17.3 | 267,063 | 50,433 | 18.9 | 281,561 | 57,306 | 20.4 | 287,596 | 60,711 | 21.1 |

† Data not available prior to 1980. * Excluding programmers.

SOURCE: Academic Science/Engineering: Scientists and Engineers, January 1984, NSF 85-316, and Summary Tables, January 1985, National Science Foundation

## TABLE 5-10

SCIENTISTS AND ENGINEERS EMPLOYED BY UNIVERSITIES AND COLLEGES BY FIELD, EMPLOYMENT STATUS AND SEX, JANUARY 1980-1985

| FIELD OF EMPLOYMENT | MALE | | | | | | FEMALE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FULL-TIME | | | PART-TIME | | | FULL-TIME | | | PART-TIME | | |
| | 1980 | 1982 | 1985 | 1980 | 1982 | 1985 | 1980 | 1982 | 1985 | 1980 | 1982 | 1985 |
| TOTAL | 210,775 | 217,094 | 226,885 | 51,816 | 60,441 | 66,875 | 44,215 | 50,677 | 60,711 | 17,443 | 21,098 | 25,889 |
| ENGINEERS | 25,759 | 27,090 | 28,825 | 6,987 | 8,027 | 9,267 | 713 | 860 | 1,253 | 278 | 358 | 516 |
| Aeronautical and Astronautical Engineers | 1,117 | 1,064 | 1,189 | 248 | 229 | 298 | 27 | 20 | 23 | 15 | 10 | 19 |
| Chemical Engineers | 1,827 | 1,820 | 2,034 | 445 | 527 | 437 | 59 | 90 | 253 | 21 | 26 | 32 |
| Civil Engineers | 4,207 | 4,572 | 4,854 | 1,167 | 1,287 | 1,463 | 118 | 167 | 250 | 37 | 65 | 108 |
| Electrical Engineers | 6,260 | 6,657 | 7,503 | 1,751 | 2,186 | 2,945 | 114 | 132 | 239 | 29 | 61 | 112 |
| Mechanical Engineers | 4,725 | 4,948 | 5,431 | 1,228 | 1,548 | 1,607 | 92 | 90 | 112 | 29 | 51 | 71 |
| Other Engineers | 7,623 | 8,029 | 7,834 | 2,148 | 2,450 | 2,517 | 303 | 361 | 504 | 147 | 145 | 175 |
| PHYSICAL SCIENTISTS | 25,502 | 25,889 | 26,488 | 4,237 | 4,602 | 5,554 | 2,491 | 2,649 | 2,907 | 1,324 | 1,523 | 1,492 |
| Astronomers | 750 | 932 | 965 | 117 | 166 | 254 | 68 | 74 | 82 | 20 | 31 | 38 |
| Chemists | 12,551 | 12,728 | 12,978 | 2,245 | 2,418 | 2,830 | 1,779 | 1,897 | 2,098 | 1,059 | 985 | 1,145 |
| Physicists | 10,831 | 10,915 | 11,275 | 1,524 | 1,651 | 2,052 | 492 | 510 | 613 | 160 | 192 | 222 |
| Other Physical Scientists | 1,370 | 1,314 | 1,270 | 351 | 367 | 437 | 152 | 168 | 178 | 105 | 115 | 87 |
| ENVIRONMENTAL SCIENTISTS | 7,775 | 7,853 | 8,083 | 1,210 | 1,192 | 1,301 | 678 | 815 | 892 | 297 | 335 | 419 |
| Atmospheric Scientists | 749 | 712 | 798 | 136 | 114 | 142 | 44 | 50 | 59 | 14 | 10 | 31 |
| Earth Scientists | 5,156 | 5,214 | 5,213 | 832 | 798 | 776 | 398 | 450 | 461 | 183 | 216 | 225 |
| Oceanographers | 1,343 | 1,272 | 1,277 | 125 | 119 | 141 | 145 | 211 | 242 | 50 | 57 | 55 |
| Other Environmental Scientists | 527 | 654 | 795 | 117 | 161 | 243 | 91 | 104 | 130 | 50 | 72 | 110 |
| MATHEMATICAL AND COMPUTER SCIENTISTS | 21,945 | 23,503 | 26,599 | 7,120 | 10,130 | 13,040 | 4,085 | 4,877 | 6,380 | 2,807 | 3,787 | 5,092 |
| Mathematicians | 16,738 | 17,044 | 17,734 | 4,725 | 6,302 | 7,552 | 3,176 | 3,522 | 4,039 | 2,440 | 3,075 | 3,744 |
| Computer Scientists | 5,207 | 6,459 | 8,865 | 2,395 | 3,828 | 5,488 | 909 | 1,355 | 2,341 | 367 | 712 | 1,348 |
| LIFE SCIENTISTS | 84,054 | 86,780 | 90,954 | 19,018 | 22,048 | 23,088 | 24,101 | 28,931 | 36,063 | 6,529 | 8,578 | 11,624 |
| Agricultural Scientists | 13,113 | 13,197 | 13,546 | 1,172 | 1,402 | 1,457 | 1,527 | 1,466 | 2,040 | 287 | 380 | 485 |
| Biological Scientists | 30,497 | 31,049 | 32,234 | 5,804 | 4,077 | 4,651 | 8,217 | 9,110 | 10,452 | 2,285 | 2,503 | 3,209 |
| Medical Scientists | 38,601 | 39,926 | 42,246 | 13,483 | 15,634 | 15,878 | 11,719 | 13,159 | 15,298 | 3,517 | 4,268 | 5,251 |
| Other Life Scientists | 1,843 | 2,608 | 2,928 | 559 | 935 | 1,102 | 2,842 | 5,196 | 8,272 | 640 | 1,427 | 2,679 |
| PHYCHOLOGISTS | 12,415 | 12,348 | 11,993 | 3,844 | 4,125 | 4,153 | 4,318 | 4,448 | 4,698 | 2,680 | 2,776 | 2,940 |
| SOCIAL SCIENTISTS | 33,325 | 33,631 | 33,942 | 9,400 | 10,317 | 10,472 | 7,829 | 8,097 | 8,454 | 3,528 | 3,941 | 3,805 |
| Economists | 9,982 | 10,254 | 10,552 | 3,049 | 3,449 | 3,308 | 1,110 | 1,199 | 1,395 | 531 | 553 | 574 |
| Political Scientists | 7,655 | 7,894 | 7,852 | 1,934 | 2,112 | 2,044 | 1,112 | 1,279 | 1,325 | 493 | 547 | 535 |
| Sociologists | 7,920 | 7,734 | 7,463 | 2,221 | 2,333 | 2,155 | 2,940 | 3,028 | 2,703 | 1,420 | 1,543 | 1,346 |
| Other Social Scientists | 7,768 | 7,749 | 8,075 | 2,196 | 2,423 | 2,965 | 2,667 | 2,591 | 3,031 | 1,084 | 1,298 | 1,394 |

SOURCE: Academic Science/Engineering: Scientists and Engineers, January 1984, National Science Foundation, NSF 85-316

TABLE 5-11

SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES BY EMPLOYMENT STATUS, TYPE OF INSTITUTION, CONTROL AND SEX, 1984

| TYPE OF INSTITUTION AND CONTROL | FULL TIME | | | PART TIME | | | % OF ALL WOMEN | | | % OF ALL MEN | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Full Time | Part Time | Total | Full Time | Part Time |
| ALL INSTITUTIONS | 281,561 | 57,306 | 20.4 | 88,889 | 24,707 | 27.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Public | 196,754 | 40,023 | 20.3 | 58,070 | 17,147 | 29.5 | 69.7 | 69.8 | 69.4 | 68.5 | 69.9 | 63.8 |
| Private | 84,807 | 17,283 | 20.4 | 30,819 | 7,560 | 25.5 | 30.3 | 30.2 | 30.6 | 31.5 | 30.1 | 36.2 |
| INSTITUTIONS GRANTING DOCTORATE IN S/E | 197,508 | 38,041 | 19.3 | 46,778 | 11,955 | 25.6 | 61.0 | 66.4 | 48.4 | 67.4 | 71.1 | 54.3 |
| Public | 136,067 | 26,374 | 19.4 | 28,239 | 8,217 | 29.1 | 42.2 | 46.0 | 33.3 | 45.0 | 48.9 | 31.2 |
| Private | 61,441 | 11,667 | 19.0 | 18,539 | 3,738 | 20.2 | 18.8 | 20.3 | 15.1 | 22.4 | 22.2 | 23.1 |
| MASTER'S IN S/E | 32,822 | 6,582 | 20.1 | 11,921 | 3,726 | 31.3 | 12.6 | 11.5 | 15.1 | 11.9 | 11.7 | 12.8 |
| Public | 25,743 | 5,084 | 19.8 | 7,486 | 2,352 | 31.4 | 9.1 | 8.9 | 9.5 | 8.9 | 9.2 | 8.0 |
| Private | 7,079 | 1,498 | 21.2 | 4,435 | 1,374 | 31.0 | 3.5 | 2.6 | 5.6 | 3.0 | 2.5 | 4.8 |
| BACHELOR'S IN S/E | 21,913 | 5,007 | 23.0 | 7,999 | 2,539 | 31.7 | 9.2 | 8.7 | 10.3 | 7.7 | 7.5 | 8.5 |
| Public | 7,080 | 1,198 | 16.9 | 999 | 350 | 35.0 | 1.9 | 2.1 | 1.4 | 2.3 | 2.6 | 1.0 |
| Private | 14,733 | 3,809 | 25.9 | 7,000 | 2,189 | 31.3 | 7.3 | 6.6 | 8.9 | 5.4 | 4.9 | 7.5 |
| OTHER DEGREES | 476 | 13 | 2.7 | 69 | 18 | 26.1 | 0.04 | 0.02 | 0.07 | 0.2 | 0.2 | 1.08 |
| Public | 283 | 6 | 2.1 | 43 | 2 | 4.7 | 0.01 | 0.01 | 0.01 | 0.1 | 0.1 | 0.06 |
| Private | 193 | 7 | 3.6 | 26 | 16 | 61.5 | 0.03 | 0.01 | 0.06 | 0.1 | 0.1 | 0.02 |
| TWO-YR INSTITUTIONS | 28,942 | 7,663 | 26.5 | 22,122 | 6,469 | 6.6 | 17.2 | 13.4 | 26.2 | 12.8 | 9.5 | 24.4 |
| Public | 27,581 | 7,361 | 26.7 | 21,303 | 6,226 | 29.2 | 16.6 | 12.9 | 25.2 | 12.2 | 9.0 | 23.5 |
| Private | 1,361 | 302 | 22.2 | 819 | 243 | 29.7 | 0.7 | 0.5 | 1.0 | 0.6 | 0.5 | 0.9 |

SOURCE: Academic Science/Engineering: Scientists and Engineers, January 1985, Summary Tables, National Science Foundation, 1986

## TABLE 5-12

### FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED AT PUBLIC UNIVERSITIES AND COLLEGES, BY FIELD OF SCIENCE AND SEX, JANUARY 1985

| INSTITUTIONAL RANKING | TOTAL, ALL FIELDS | | ENGINEERS | | PHYSICAL SCIENTISTS | | ENVIRON-MENTAL SCIENTISTS | | MATH. AND COMPUTER SCIENTISTS | | LIFE SCIENTISTS | | PSYCHOLOGISTS | | SOCIAL SCIENTISTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN |
| TOTAL, ALL INSTS. | 200355 | 42243 | 22284 | 1010 | 19368 | 1919 | 7291 | 701 | 24525 | 4767 | 84461 | 24521 | 11856 | 3297 | 30571 | 6028 |
| 1 UNIV OF WIS-MADISON | 3247 | 813 | 318 | 32 | 206 | 9 | 208 | 30 | 206 | 19 | 1838 | 577 | 161 | 60 | 310 | 86 |
| 2 LOUISIANA STATE UNIV | 3026 | 982 | 179 | 7 | 130 | 6 | 127 | 36 | 168 | 47 | 2230 | 848 | 37 | 9 | 155 | 29 |
| 3 UNIVERSITY OF MINNESOTA | 2919 | 505 | 243 | 16 | 152 | 14 | 40 | 2 | 158 | 13 | 1710 | 322 | 104 | 31 | 512 | 107 |
| 4 OHIO STATE UNIVERSITY | 2872 | 782 | 302 | 18 | 235 | 26 | 37 | 3 | 167 | 20 | 1734 | 614 | 57 | 11 | 340 | 90 |
| 5 UNIVERSITY OF MICHIGAN | 2634 | 670 | 343 | 29 | 275 | 38 | 63 | 7 | 110 | 14 | 1387 | 434 | 146 | 54 | 310 | 94 |
| 6 UNIVERSITY OF FLORIDA | 2496 | 498 | 279 | 13 | 103 | 3 | 24 | 2 | 79 | 10 | 1791 | 435 | 41 | 8 | 179 | 27 |
| 7 TEXAS A & M UNIVERSITY | 2430 | 182 | 407 | 10 | 112 | 5 | 91 | 6 | 153 | 13 | 1232 | 69 | 55 | 12 | 480 | 67 |
| 8 UNIV OF ILL URBANA | 2173 | 387 | 391 | 24 | 258 | 24 | 129 | 27 | 198 | 34 | 770 | 172 | 143 | 46 | 284 | 60 |
| 9 PENNSYLVANIA STATE UNIV | 2157 | 276 | 628 | 25 | 199 | 14 | 90 | 4 | 209 | 49 | 751 | 140 | 76 | 18 | 204 | 26 |
| 10 UNIV OF CAL LOS ANGELES | 2115 | 599 | 230 | 34 | 183 | 28 | 82 | 10 | 71 | 7 | 1271 | 442 | 75 | 23 | 203 | 55 |
| TOTAL, 1ST 10 INSTS. | 26069 | 5694 | 3320 | 208 | 1853 | 167 | 891 | 127 | 1519 | 226 | 14616 | 4053 | 895 | 272 | 2977 | 641 |
| 11 UNIVERSITY OF PITTSBURGH | 2104 | 618 | 143 | 9 | 163 | 19 | 17 | 1 | 206 | 64 | 1250 | 431 | 93 | 38 | 232 | 56 |
| 12 PURDUE UNIVERSITY | 2083 | 304 | 538 | 19 | 246 | 18 | 30 | 1 | 245 | 47 | 724 | 176 | 91 | 20 | 209 | 23 |
| 13 UNIVERSITY OF WASHINGTON | 1928 | 362 | 305 | 14 | 141 | 6 | 155 | 22 | 92 | 8 | 1011 | 261 | 52 | 15 | 172 | 36 |
| 14 UNIVERSITY OF KENTUCKY | 1920 | 402 | 161 | 4 | 138 | 22 | 54 | 7 | 156 | 46 | 1089 | 262 | 76 | 26 | 246 | 35 |
| 15 MICHIGAN STATE UNIVERSITY | 1904 | 378 | 106 | 6 | 193 | 22 | 59 | 1 | 112 | 12 | 974 | 248 | 106 | 25 | 354 | 64 |
| 16 N C STATE UNIV AT RALEIGH | 1760 | 184 | 340 | 16 | 98 | 11 | 31 | 1 | 148 | 22 | 952 | 107 | 21 | 5 | 170 | 24 |
| 17 UNIVERSITY OF IOWA | 1754 | 387 | 73 | 1 | 101 | 8 | 17 | 3 | 92 | 7 | 1266 | 330 | 35 | 6 | 170 | 32 |
| 18 UNIV OF CAL DAVIS | 1702 | 339 | 93 | 6 | 66 | 5 | 18 | 1 | 50 | 6 | 1365 | 295 | 20 | 5 | 90 | 21 |
| 19 UNIV OF TEXAS AT AUSTIN | 1684 | 269 | 266 | 11 | 387 | 34 | 175 | 22 | 247 | 38 | 206 | 59 | 107 | 30 | 296 | 75 |
| 20 INDIANA UNIVERSITY | 1661 | 420 | 42 | 4 | 181 | 16 | 104 | 6 | 120 | 11 | 897 | 313 | 113 | 23 | 204 | 47 |
| TOTAL, 1ST 20 INSTS. | 44569 | 9359 | 5387 | 298 | 3567 | 328 | 1551 | 192 | 2987 | 487 | 24348 | 6535 | 1609 | 465 | 5120 | 1054 |
| 21 UNIV OF CAL BERKELEY | 1548 | 281 | 342 | 30 | 250 | 27 | 20 | 2 | 81 | 8 | 619 | 146 | 46 | 17 | 190 | 51 |
| 22 RUTGERS THE ST UNIV OF NJ | 1510 | 312 | 114 | 6 | 159 | 23 | 64 | 4 | 229 | 31 | 417 | 84 | 129 | 42 | 398 | 122 |
| 23 UNIV OF CAL SAN FRANCISCO | 1485 | 563 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1485 | 563 | 0 | 0 | 0 | 0 |
| 24 UNIVERSITY OF ARIZONA | 1479 | 240 | 172 | 1 | 207 | 12 | 98 | 2 | 90 | 11 | 638 | 163 | 82 | 21 | 192 | 30 |
| 25 IOWA ST U OF SCI & TECH | 1464 | 196 | 364 | 44 | 118 | 9 | 16 | 0 | 165 | 23 | 593 | 84 | 27 | 4 | 181 | 32 |
| 26 SUNY AT BUFFALO | 1437 | 452 | 216 | 42 | 83 | 15 | 17 | 3 | 113 | 27 | 780 | 338 | 71 | 22 | 157 | 45 |
| 27 UNIV OF MD COLLEGE PARK | 1426 | 263 | 234 | 15 | 346 | 49 | 39 | 4 | 185 | 30 | 361 | 99 | 67 | 21 | 194 | 45 |
| 28 UNIVERSITY OF KANSAS | 1420 | 425 | 111 | 1 | 64 | 5 | 64 | 8 | 66 | 7 | 806 | 291 | 158 | 75 | 151 | 38 |
| 29 UNIVERSITY OF CINCINNATI | 1378 | 316 | 143 | 18 | 74 | 6 | 16 | 2 | 105 | 23 | 878 | 235 | 33 | 6 | 129 | 26 |
| 30 UNIV OF NC AT CHAPEL HILL | 1348 | 253 | 39 | 1 | 91 | 9 | 25 | 1 | 60 | 2 | 928 | 197 | 50 | 14 | 155 | 29 |
| TOTAL, 1ST 30 INSTS. | 59064 | 12700 | 7122 | 456 | 4959 | 483 | 1910 | 218 | 4081 | 649 | 31853 | 8735 | 2272 | 687 | 6867 | 1472 |
| 31 UNIVERSITY OF OKLAHOMA | 1282 | 260 | 197 | 14 | 106 | 17 | 53 | 2 | 91 | 16 | 591 | 148 | 26 | 5 | 218 | 58 |
| 32 UNIV OF ILL CHICAGO | 1263 | 419 | 91 | 0 | 95 | 11 | 21 | 1 | 91 | 11 | 775 | 338 | 40 | 10 | 150 | 48 |
| 33 NEW MEXICO STATE UNIV | 1259 | 230 | 293 | 6 | 87 | 11 | 17 | 0 | 198 | 55 | 377 | 66 | 81 | 30 | 206 | 62 |
| 34 UNIVERSITY OF CONNECTICUT | 1251 | 300 | 114 | 4 | 62 | 5 | 34 | 4 | 83 | 10 | 653 | 182 | 107 | 34 | 198 | 61 |
| 35 UNIV OF CAL SAN DIEGO | 1239 | 278 | 29 | 4 | 140 | 14 | 280 | 57 | 83 | 7 | 608 | 174 | 30 | 9 | 69 | 13 |
| 36 UNIVERSITY OF UTAH | 1223 | 247 | 142 | 10 | 129 | 7 | 35 | 5 | 93 | 4 | 676 | 184 | 30 | 7 | 118 | 30 |
| 37 UNIV OF MISSOURI COLUMBIA | 1200 | 209 | 116 | 11 | 64 | 4 | 25 | 0 | 80 | 11 | 738 | 143 | 32 | 7 | 145 | 33 |
| 38 UNIV ALABAMA BIRMINGHAM | 1197 | 205 | 31 | 4 | 32 | 2 | 10 | 1 | 35 | 5 | 992 | 174 | 42 | 8 | 55 | 11 |
| 39 SUNY AT STONY BROOK | 1188 | 267 | 70 | 3 | 193 | 16 | 67 | 10 | 96 | 12 | 596 | 187 | 57 | 17 | 109 | 22 |
| 40 UNIVERSITY OF GEORGIA | 1149 | 114 | 29 | 0 | 72 | 2 | 52 | 4 | 87 | 12 | 675 | 65 | 62 | 10 | 172 | 21 |
| TOTAL, 1ST 40 INSTS. | 71315 | 15229 | 8234 | 512 | 5939 | 572 | 2504 | 302 | 5018 | 792 | 38534 | 10396 | 2779 | 824 | 8307 | 1831 |
| 41 GEORGIA INSTITUTE OF TECH | 1119 | 66 | 697 | 31 | 170 | 5 | 30 | 0 | 136 | 21 | 25 | 2 | 12 | 1 | 49 | 6 |
| 42 AUBURN UNIVERSITY | 1091 | 142 | 227 | 11 | 64 | 5 | 10 | 0 | 117 | 20 | 484 | 74 | 39 | 14 | 150 | 18 |
| 43 OREGON STATE UNIVERSITY | 1088 | 132 | 136 | 2 | 103 | 10 | 134 | 10 | 75 | 4 | 547 | 87 | 10 | 4 | 83 | 15 |
| 44 WEST VIRGINIA UNIVERSITY | 1070 | 217 | 111 | 3 | 34 | 1 | 16 | 1 | 58 | 12 | 364 | 67 | 20 | 3 | 467 | 130 |
| 45 TEMPLE UNIVERSITY | 1068 | 246 | 30 | 2 | 49 | 2 | 9 | 1 | 96 | 14 | 631 | 164 | 77 | 19 | 176 | 44 |
| 46 UNIVERSITY OF VIRGINIA | 1056 | 195 | 121 | 6 | 101 | 7 | 30 | 0 | 81 | 13 | 601 | 148 | 34 | 11 | 88 | 10 |
| 47 WAYNE STATE UNIVERSITY | 1050 | 300 | 64 | 22 | 79 | 19 | 7 | 1 | 82 | 23 | 654 | 195 | 36 | 6 | 128 | 34 |
| 48 VA POLYTECH INST & ST U | 1045 | 67 | 306 | 6 | 87 | 2 | 25 | 2 | 91 | 13 | 414 | 30 | 19 | 4 | 103 | 10 |
| 49 UNIV OF HAWAII-MANOA | 1041 | 239 | 57 | 2 | 98 | 8 | 93 | 10 | 58 | 4 | 509 | 165 | 33 | 9 | 193 | 41 |
| 50 COLORADO STATE UNIVERSITY | 1040 | 150 | 147 | 8 | 56 | 3 | 85 | 11 | 87 | 5 | 492 | 87 | 46 | 17 | 127 | 19 |
| TOTAL, 1ST 50 INSTS. | 81983 | 16983 | 10130 | 605 | 6780 | 634 | 2943 | 338 | 5899 | 921 | 43255 | 11415 | 3105 | 912 | 9871 | 2158 |
| TOTAL, ALL OTHER SAMPLED INSTS. | 101390 | 21642 | 10710 | 366 | 10312 | 1048 | 3754 | 317 | 14786 | 3017 | 37178 | 11584 | 7234 | 1969 | 17416 | 3341 |
| ESTIMATED TOTAL, NON-SAMPLED INSTS. | 16982 | 3618 | 1464 | 39 | 2276 | 237 | 594 | 46 | 3840 | 829 | 4028 | 1522 | 1517 | 416 | 3284 | 529 |

SOURCE: Academic Science/Engineering: Scientists and Engineers, January 1985, Summary Tables, National Science Foundation, 1986

## TABLE 5-13

### FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED AT PRIVATE UNIVERSITIES AND COLLEGES, BY FIELD OF SCIENCE AND SEX, JANUARY 1985

| INSTITUTIONAL RANKING | TOTAL, ALL FIELDS | | ENGINEERS | | PHYSICAL SCIENTISTS | | ENVIRON-MENTAL SCIENTISTS | | MATH. AND COMPUTER SCIENTISTS | | LIFE SCIENTISTS | | PSYCHOLOGISTS | | SOCIAL SCIENTISTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN |
| TOTAL, ALL INSTS. | 87240 | 18468 | 7794 | 243 | 10090 | 1052 | 1685 | 191 | 8454 | 1613 | 42557 | 11543 | 4834 | 1400 | 11825 | 2426 |
| 1 HARVARD UNIVERSITY | 4989 | 1073 | 41 | 0 | 239 | 14 | 44 | 3 | 59 | 10 | 4401 | 1013 | 38 | 9 | 167 | 24 |
| 2 JOHNS HOPKINS UNIVERSITY | 3629 | 607 | 1040 | 25 | 403 | 24 | 33 | 2 | 225 | 48 | 1725 | 452 | 25 | 5 | 178 | 51 |
| 3 CORNELL UNIVERSITY | 2440 | 476 | 317 | 14 | 225 | 15 | 29 | 6 | 70 | 12 | 1409 | 316 | 119 | 49 | 271 | 64 |
| 4 MASS INST OF TECHNOLOGY | 2195 | 337 | 632 | 44 | 555 | 42 | 137 | 20 | 167 | 13 | 428 | 156 | 59 | 28 | 217 | 34 |
| 5 COLUMBIA UNIV MAIN DIV | 2048 | 552 | 106 | 2 | 124 | 10 | 181 | 39 | 70 | 2 | 1279 | 427 | 19 | 7 | 269 | 65 |
| 6 YALE UNIVERSITY | 1821 | 481 | 49 | 3 | 119 | 7 | 34 | 1 | 67 | 10 | 1372 | 433 | 40 | 14 | 140 | 13 |
| 7 WASHINGTON UNIVERSITY | 1641 | 359 | 54 | 0 | 86 | 6 | 17 | 6 | 82 | 13 | 1305 | 323 | 31 | 5 | 66 | 6 |
| 8 UNIV OF PENNSYLVANIA | 1543 | 278 | 86 | 3 | 99 | 6 | 6 | 0 | 79 | 9 | 1036 | 226 | 21 | 4 | 216 | 30 |
| 9 UNIV OF SOUTHERN CAL | 1493 | 278 | 207 | 7 | 122 | 13 | 25 | 2 | 53 | 2 | 924 | 214 | 46 | 5 | 116 | 35 |
| 10 DUKE UNIVERSITY | 1466 | 257 | 52 | 2 | 91 | 8 | 42 | 13 | 41 | 4 | 1127 | 213 | 22 | 4 | 89 | 13 |
| TOTAL, 1ST 10 INSTS. | 23263 | 4698 | 2584 | 100 | 2063 | 145 | 548 | 92 | 913 | 123 | 15006 | 3773 | 420 | 130 | 1729 | 335 |
| 11 NEW YORK UNIVERSITY | 1433 | 269 | 24 | 0 | 78 | 4 | 0 | 0 | 154 | 11 | 905 | 189 | 82 | 24 | 190 | 41 |
| 12 CASE WESTERN RESERVE UNIV | 1355 | 288 | 134 | 9 | 76 | 4 | 8 | 0 | 43 | 4 | 1044 | 261 | 15 | 4 | 35 | 6 |
| 13 UNIVERSITY OF MIAMI | 1344 | 370 | 72 | 0 | 34 | 0 | 82 | 8 | 61 | 12 | 1005 | 338 | 34 | 4 | 56 | 8 |
| 14 UNIVERSITY OF CHICAGO | 1258 | 235 | 46 | 1 | 171 | 12 | 41 | 2 | 64 | 3 | 771 | 191 | 45 | 14 | 120 | 12 |
| 15 NORTHWESTERN UNIVERSITY | 1246 | 231 | 143 | 5 | 151 | 13 | 14 | 2 | 110 | 6 | 597 | 164 | 58 | 13 | 173 | 28 |
| 16 UNIVERSITY OF ROCHESTER | 1132 | 173 | 43 | 1 | 149 | 6 | 7 | 0 | 44 | 2 | 786 | 152 | 36 | 5 | 67 | 7 |
| 17 STANFORD UNIVERSITY | 1074 | 116 | 251 | 11 | 145 | 6 | 35 | 3 | 90 | 5 | 441 | 72 | 22 | 6 | 90 | 13 |
| 18 HOWARD UNIVERSITY | 1073 | 293 | 62 | 0 | 43 | 5 | 5 | 0 | 59 | 10 | 795 | 251 | 20 | 2 | 89 | 25 |
| 19 CUNY MT SINAI SCH OF MED | 992 | 250 | 6 | 0 | 9 | 1 | 0 | 0 | 2 | 0 | 973 | 249 | 2 | 0 | 0 | 0 |
| 20 VANDERBILT UNIVERSITY | 903 | 146 | 57 | 3 | 74 | 4 | 9 | 2 | 56 | 6 | 575 | 108 | 71 | 19 | 61 | 4 |
| TOTAL, 1ST 20 INSTS. | 35073 | 7069 | 3422 | 130 | 2993 | 200 | 749 | 109 | 1596 | 182 | 22898 | 5748 | 805 | 221 | 7610 | 479 |
| 21 GEORGETOWN UNIVERSITY | 899 | 266 | 0 | 0 | 28 | 1 | 0 | 0 | 14 | 1 | 770 | 245 | 12 | 2 | 75 | 17 |
| 22 BOSTON UNIVERSITY | 897 | 211 | 52 | 3 | 68 | 6 | 6 | 0 | 47 | 6 | 579 | 156 | 33 | 13 | 112 | 27 |
| 23 YESHIVA UNIVERSITY | 867 | 200 | 5 | 0 | 60 | 13 | 0 | 0 | 13 | 3 | 689 | 152 | 49 | 18 | 51 | 14 |
| 24 BAYLOR COL OF MEDICINE | 866 | 196 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 866 | 196 | 0 | 0 | 0 | 0 |
| 25 MAYO GRAD SCHOOL OF MED | 825 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 825 | 205 | 0 | 0 | 0 | 0 |
| 26 NORTHEASTERN UNIVERSITY | 672 | 182 | 154 | 6 | 107 | 6 | 9 | 1 | 80 | 23 | 181 | 105 | 32 | 10 | 109 | 31 |
| 27 GEORGE WASHINGTON UNIV | 652 | 137 | 66 | 0 | 39 | 0 | 7 | 0 | 78 | 18 | 346 | 98 | 23 | 6 | 93 | 15 |
| 28 NEW YORK MEDICAL COLLEGE | 599 | 161 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 599 | 161 | 0 | 0 | 0 | 0 |
| 29 SYRACUSE UNIVERSITY | 594 | 126 | 116 | 4 | 134 | 19 | 12 | 1 | 81 | 13 | 113 | 62 | 34 | 5 | 104 | 22 |
| 30 BRIGHAM YOUNG UNIVERSITY | 589 | 71 | 85 | 0 | 61 | 1 | 21 | 1 | 138 | 16 | 139 | 37 | 44 | 6 | 101 | 10 |
| TOTAL, 1ST 30 INSTS. | 42533 | 8824 | 3900 | 143 | 3490 | 246 | 804 | 112 | 2047 | 262 | 28005 | 7165 | 1032 | 281 | 3255 | 615 |
| 31 TUFTS UNIVERSITY | 567 | 102 | 43 | 2 | 33 | 2 | 13 | 3 | 33 | 4 | 385 | 72 | 15 | 4 | 45 | 15 |
| 32 MEDICAL COLLEGE OF WIS | 552 | 194 | 21 | 0 | 48 | 15 | 0 | 0 | 14 | 7 | 469 | 172 | 0 | 0 | 0 | 0 |
| 33 TULANE UNIVERSITY | 552 | 60 | 39 | 1 | 22 | 0 | 8 | 2 | 43 | 3 | 338 | 41 | 25 | 3 | 77 | 10 |
| 34 CARNEGIE-MELLON UNIV | 548 | 67 | 147 | 7 | 77 | 5 | 0 | 0 | 146 | 9 | 57 | 24 | 42 | 17 | 79 | 5 |
| 35 ROCKEFELLER UNIVERSITY | 523 | 109 | 0 | 0 | 34 | 3 | 0 | 0 | 6 | 0 | 431 | 91 | 52 | 15 | 0 | 0 |
| 36 WAKE FOREST UNIVERSITY | 522 | 60 | 1 | 0 | 24 | 1 | 0 | 0 | 20 | 1 | 418 | 44 | 23 | 7 | 36 | 7 |
| 37 CALIFORNIA INST OF TECH | 519 | 48 | 123 | 1 | 224 | 14 | 55 | 7 | 22 | 0 | 75 | 25 | 0 | 0 | 20 | 1 |
| 38 PRINCETON UNIVERSITY | 507 | 67 | 93 | 7 | 140 | 12 | 48 | 7 | 49 | 3 | 46 | 16 | 22 | 3 | 109 | 19 |
| 39 ST LOUIS UNIVERSITY | 500 | 107 | 15 | 0 | 16 | 3 | 14 | 0 | 11 | 1 | 400 | 96 | 16 | 3 | 28 | 4 |
| 40 BRANDEIS UNIVERSITY | 486 | 133 | 0 | 0 | 80 | 9 | 0 | 0 | 50 | 7 | 144 | 50 | 36 | 10 | 176 | 57 |
| TOTAL, 1ST 40 INSTS. | 47809 | 9771 | 4382 | 161 | 4188 | 310 | 942 | 131 | 2441 | 297 | 30768 | 7796 | 1263 | 343 | 3825 | 733 |
| 41 THOMAS JEFFERSON UNIV | 447 | 121 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 437 | 120 | 8 | 1 | 0 | 0 |
| 42 LOYOLA UNIV - CHICAGO | 441 | 80 | 0 | 0 | 25 | 1 | 0 | 0 | 23 | 3 | 303 | 58 | 32 | 4 | 58 | 14 |
| 43 RENSSELAER POLYTECH INST | 399 | 28 | 205 | 7 | 76 | 4 | 8 | 0 | 66 | 9 | 15 | 3 | 10 | 2 | 19 | 3 |
| 44 RUSH UNIVERSITY | 397 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 370 | 46 | 27 | 7 | 0 | 0 |
| 45 BROWN UNIVERSITY | 396 | 49 | 52 | 0 | 71 | 5 | 25 | 3 | 65 | 3 | 95 | 24 | 22 | 3 | 66 | 11 |
| 46 UNIVERSITY OF NOTRE DAME | 374 | 39 | 74 | 2 | 129 | 15 | 7 | 0 | 33 | 2 | 42 | 6 | 22 | 6 | 67 | 8 |
| 47 DARTMOUTH COLLEGE | 373 | 65 | 34 | 2 | 41 | 1 | 10 | 1 | 27 | 2 | 186 | 38 | 29 | 11 | 46 | 10 |
| 48 UNIVERSITY OF DAYTON | 341 | 18 | 126 | 2 | 88 | 2 | 4 | 1 | 49 | 3 | 22 | 4 | 24 | 2 | 28 | 4 |
| 49 HAHNEMANN UNIVERSITY | 337 | 62 | 2 | 0 | 9 | 0 | 0 | 0 | 1 | 0 | 298 | 57 | 24 | 4 | 3 | 1 |
| 50 LONG ISLAND UNIVERSITY | 325 | 86 | 0 | 0 | 42 | 3 | 16 | 3 | 46 | 9 | 114 | 45 | 30 | 9 | 77 | 17 |
| TOTAL, 1ST 50 INSTS. | 51639 | 10372 | 4875 | 174 | 4669 | 341 | 1012 | 139 | 2753 | 328 | 32650 | 8197 | 1491 | 392 | 4189 | 801 |
| TOTAL, ALL OTHER SAMPLED INSTS. | 22376 | 4779 | 2293 | 57 | 3123 | 380 | 477 | 43 | 3220 | 679 | 6956 | 2117 | 1941 | 584 | 4366 | 919 |
| ESTIMATED TOTAL, NON-SAMPLED INSTS. | 13225 | 3317 | 626 | 12 | 2298 | 331 | 196 | 9 | 2481 | 606 | 2951 | 1229 | 1402 | 424 | 3270 | 706 |

SOURCE: Selected data from Academic Science/Engineering: Postdoctorates and Other Nonfaculty Research staff in Doctorate Institutions, National Science Foundation, October 1986, unpublished

## TABLE 5-14

SCIENCE/ENGINEERING POSTDOCTORATES AND OTHER NONFACULTY DOCTORAL RESEARCH STAFF IN DOCTORATE-GRANTING INSTITUTIONS, BY FIELD AND SEX, 1985

| FIELD | POSTDOCTORATES | | | OTHER NONFACULTY DOCTORAL RESEARCH STAFF | | |
|---|---|---|---|---|---|---|
| | TOTAL | MEN | WOMEN | TOTAL | MEN | WOMEN |
| TOTAL, ALL FIELDS | 22,691 | 17,174 | 5,517 | 5,120 | 3,828 | 1,292 |
| ENGINEERING | 1,364 | 1,264 | 100 | 609 | 558 | 51 |
| AEROSPACE | 51 | 50 | 1 | 21 | 20 | 1 |
| AGRICULTURAL | 15 | 14 | 1 | 4 | 4 | 0 |
| BIOMEDICAL | 47 | 39 | 8 | 14 | 14 | 0 |
| CHEMICAL | 273 | 246 | 27 | 76 | 64 | 12 |
| CIVIL | 122 | 119 | 3 | 31 | 31 | 0 |
| ELECTRICAL | 176 | 165 | 11 | 148 | 140 | 8 |
| ENGINEERING SCIENCE | 90 | 84 | 6 | 29 | 27 | 2 |
| INDUSTRIAL | 20 | 17 | 3 | 8 | 6 | 2 |
| MECHANICAL | 217 | 204 | 13 | 104 | 102 | 2 |
| METALLURGICAL/MATERIALS | 246 | 222 | 23 | 131 | 109 | 22 |
| MINING | 19 | 19 | 0 | 0 | 0 | 0 |
| NUCLEAR | 31 | 29 | 2 | 26 | 25 | 1 |
| PETROLEUM | 6 | 5 | 1 | 5 | 5 | 0 |
| ENGINEERING, N.E.C. | 52 | 51 | 1 | 12 | 11 | 1 |
| SCIENCES, TOTAL | 21,327 | 15,910 | 5,417 | 4,511 | 3,270 | 1,241 |
| PHYSICAL SCIENCES | 4,517 | 3,917 | 600 | 962 | 835 | 127 |
| ASTRONOMY | 138 | 133 | 5 | 78 | 63 | 15 |
| CHEMISTRY | 2,995 | 2,514 | 481 | 396 | 323 | 73 |
| PHYSICS | 1,342 | 1,238 | 104 | 485 | 446 | 39 |
| PHYSICAL SCIENCES, N.E.C. | 42 | 32 | 10 | 3 | 3 | 0 |
| ENVIRONMENTAL SCIENCES | 375 | 318 | 57 | 184 | 163 | 21 |
| ATMOSPHERIC SCIENCES | 48 | 39 | 9 | 42 | 37 | 5 |
| GEOSCIENCES | 226 | 195 | 31 | 87 | 76 | 11 |
| OCEANOGRAPHY | 79 | 68 | 11 | 38 | 34 | 4 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 22 | 16 | 6 | 17 | 16 | 1 |
| MATHEMATICAL SCIENCES | 231 | 202 | 29 | 176 | 153 | 23 |
| COMPUTER SCIENCES | 74 | 64 | 10 | 77 | 67 | 10 |
| LIFE SCIENCES | 15,264 | 10,893 | 4,371 | 2,756 | 1,846 | 910 |
| AGRICULTURAL SCIENCES | 357 | 289 | 68 | 116 | 84 | 32 |
| BIOLOGICAL SCIENCES | 9,284 | 6,497 | 2,787 | 1,679 | 1,134 | 545 |
| ANATOMY | 320 | 224 | 96 | 62 | 40 | 22 |
| BIOCHEMISTRY | 1,909 | 1,365 | 544 | 341 | 221 | 120 |
| BIOLOGY | 1,127 | 793 | 334 | 285 | 196 | 89 |
| BIOMETRY/EPIDEMIOLOGY | 59 | 32 | 27 | 24 | 15 | 9 |
| BIOPHYSICS | 101 | 77 | 24 | 24 | 17 | 7 |
| BOTANY | 373 | 277 | 96 | 68 | 50 | 18 |
| CELL BIOLOGY | 753 | 481 | 272 | 95 | 63 | 32 |
| ECOLOGY | 37 | 32 | 5 | 13 | 9 | 4 |
| ENTOMOLOGY/PARASITOLOGY | 139 | 112 | 27 | 60 | 51 | 9 |
| GENETICS | 377 | 254 | 123 | 68 | 44 | 24 |
| MICROBIOLOGY | 1,162 | 781 | 381 | 137 | 79 | 58 |
| NUTRITION | 202 | 138 | 64 | 41 | 29 | 12 |
| PATHOLOGY | 626 | 428 | 198 | 101 | 64 | 37 |
| PHARMACOLOGY | 861 | 607 | 254 | 169 | 126 | 43 |
| PHYSIOLOGY | 845 | 630 | 215 | 131 | 98 | 33 |
| ZOOLOGY | 213 | 135 | 78 | 47 | 26 | 21 |
| BIOSCIENCES, N.E.C. | 180 | 131 | 49 | 13 | 6 | 7 |
| HEALTH SCIENCES | 5,623 | 4,107 | 1,516 | 961 | 628 | 333 |
| DENTISTRY | 224 | 183 | 41 | 66 | 61 | 5 |
| NEUROLOGY | 323 | 232 | 91 | 68 | 52 | 16 |
| NURSING | 20 | 1 | 19 | 27 | 4 | 23 |
| PHARMACEUTICAL SCIENCES | 318 | 245 | 73 | 51 | 38 | 13 |
| PREVENTIVE MEDICINE/ COMMUNITY HEALTH | 176 | 125 | 51 | 8 | 23 | 15 |
| SPEECH PATHOLOGY/AUDIOLOGY | 18 | 7 | 11 | 8 | 5 | 3 |
| VETERINARY SCIENCES | 69 | 46 | 23 | 32 | 16 | 16 |
| CLINICAL MEDICINE, N.E.C. | 4,321 | 3,167 | 1,154 | 636 | 407 | 229 |
| HEALTH RELATED, N.E.C. | 154 | 101 | 53 | 35 | 22 | 13 |
| PSYCHOLOGY | 498 | 273 | 225 | 209 | 115 | 94 |
| SOCIAL SCIENCES | 368 | 243 | 125 | 147 | 91 | 56 |
| AGRICULTURAL ECONOMICS | 31 | 29 | 2 | 10 | 9 | 1 |
| ANTHROPOLOGY | 57 | 29 | 28 | 37 | 19 | 18 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 19 | 15 | 4 | 32 | 17 | 15 |
| GEOGRAPHY | 10 | 8 | 2 | 4 | 4 | 0 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 11 | 5 | 6 | 1 | 1 | 0 |
| LINGUISTICS | 26 | 12 | 14 | 11 | 10 | 1 |
| POLITICAL SCIENCE | 44 | 39 | 5 | 12 | 7 | 5 |
| SOCIOLOGY | 92 | 50 | 42 | 31 | 20 | 11 |
| SOCIOLOGY/ANTHROPOLOGY | 2 | 2 | 0 | 0 | 0 | 0 |
| SOCIAL SCIENCES, N.E.C. | 76 | 54 | 22 | 9 | 4 | 5 |

SOURCE: Selected data from Academic Science/Engineering: Postdoctorates and Other Nonfaculty Research staff in Doctorate Institutions, National Science Foundation, October 1986, unpublished

## TABLE 5-15

SCIENCE/ENGINEERING POSTDOCTORATES IN DOCTORATE-GRANTING INSTITUTIONS, BY FIELD AND CITIZENSHIP
1982-1985

| FIELD | U.S. Citizens | | | | Foreign Citizens | | | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1985 | 1982 | 1983 | 1984 | 1985 |
| TOTAL, ALL FIELDS | 12,131 | 13,224 | 13,626 | 13,732 | 7,235 | 7,538 | 8,020 | 8,959 |
| ENGINEERING | 321 | 410 | 435 | 445 | 657 | 692 | 760 | 919 |
| AEROSPACE | 6 | 8 | 10 | 10 | 19 | 24 | 32 | 41 |
| AGRICULTURAL | 3 | 3 | 4 | 6 | 3 | 1 | 4 | 9 |
| BIOMEDICAL | 25 | 20 | 21 | 27 | 6 | 8 | 13 | 20 |
| CHEMICAL | 41 | 55 | 65 | 55 | 133 | 143 | 180 | 218 |
| CIVIL | 38 | 52 | 53 | 49 | 70 | 79 | 93 | 73 |
| ELECTRICAL | 82 | 67 | 41 | 76 | 94 | 107 | 110 | 100 |
| ENGINEERING SCIENCE | 35 | 39 | 25 | 41 | 41 | 32 | 38 | 49 |
| INDUSTRIAL | 4 | 6 | 12 | 18 | 5 | 8 | 10 | 2 |
| MECHANICAL | 30 | 69 | 82 | 64 | 100 | 113 | 114 | 153 |
| METALLURGICAL/MATERIALS | 28 | 53 | 52 | 47 | 138 | 151 | 116 | 198 |
| MINING | 2 | 18 | 18 | 19 | 8 | 1 | 0 | 0 |
| NUCLEAR | 10 | 6 | 7 | 12 | 8 | 9 | 12 | 19 |
| PETROLEUM | 2 | 1 | 1 | 1 | 2 | 0 | 3 | 5 |
| ENGINEERING, N.E.C. | 15 | 13 | 24 | 20 | 30 | 16 | 35 | 32 |
| SCIENCES, TOTAL | 11,810 | 12,814 | 13,191 | 13,287 | 6,578 | 6,846 | 7,260 | 8,040 |
| PHYSICAL SCIENCES | 1,914 | 2,059 | 1,974 | 2,016 | 2,367 | 2,385 | 2,412 | 2,501 |
| ASTRONOMY | 115 | 85 | 86 | 95 | 33 | 26 | 32 | 43 |
| CHEMISTRY | 1,144 | 1,306 | 1,250 | 1,277 | 1,661 | 1,667 | 1,656 | 1,718 |
| PHYSICS | 653 | 661 | 612 | 609 | 673 | 689 | 708 | 733 |
| PHYSICAL SCIENCES, N.E.C. | 2 | 7 | 26 | 35 | 0 | 3 | 16 | 7 |
| ENVIRONMENTAL SCIENCES | 214 | 256 | 324 | 250 | 121 | 159 | 164 | 125 |
| ATMOSPHERIC SCIENCES | 15 | 20 | 51 | 33 | 17 | 21 | 23 | 15 |
| GEOSCIENCES | 132 | 137 | 142 | 136 | 84 | 100 | 108 | 90 |
| OCEANOGRAPHY | 60 | 89 | 121 | 64 | 18 | 31 | 30 | 15 |
| ENVIRONMENTAL SCIENCES, N.E.C. | 7 | 10 | 10 | 17 | 2 | 7 | 3 | 5 |
| MATHEMATICAL SCIENCES | 68 | 80 | 103 | 117 | 126 | 90 | 100 | 114 |
| COMPUTER SCIENCES | 34 | 37 | 42 | 45 | 12 | 45 | 21 | 29 |
| LIFE SCIENCES | 8,939 | 9,767 | 10,119 | 10,174 | 3,786 | 3,990 | 4,413 | 5,090 |
| AGRICULTURAL SCIENCES | 163 | 214 | 256 | 215 | 116 | 81 | 102 | 142 |
| BIOLOGICAL SCIENCES | 5,359 | 5,809 | 5,982 | 6,053 | 2,397 | 2,574 | 2,815 | 3,231 |
| ANATOMY | 210 | 210 | 226 | 243 | 51 | 74 | 65 | 77 |
| BIOCHEMISTRY | 1,058 | 1,117 | 1,103 | 1,067 | 626 | 648 | 716 | 842 |
| BIOLOGY | 668 | 740 | 836 | 847 | 274 | 274 | 291 | 280 |
| BIOMETRY/EPIDEMIOLOGY | 39 | 34 | 58 | 46 | 14 | 20 | 9 | 13 |
| BIOPHYSICS | 78 | 122 | 74 | 72 | 51 | 61 | 47 | 29 |
| BOTANY | 202 | 269 | 260 | 270 | 96 | 100 | 87 | 103 |
| CELL BIOLOGY | 357 | 464 | 455 | 504 | 159 | 169 | 213 | 249 |
| ECOLOGY | 26 | 35 | 32 | 29 | 2 | 4 | 4 | 8 |
| ENTOMOLOGY/PARASITOLOGY | 89 | 82 | 92 | 103 | 30 | 30 | 21 | 36 |
| GENETICS | 238 | 244 | 266 | 263 | 76 | 100 | 116 | 114 |
| MICROBIOLOGY | 705 | 732 | 748 | 737 | 309 | 289 | 328 | 425 |
| NUTRITION | 101 | 101 | 91 | 119 | 37 | 50 | 59 | 83 |
| PATHOLOGY | 379 | 415 | 438 | 400 | 161 | 169 | 171 | 226 |
| PHARMACOLOGY | 481 | 493 | 501 | 540 | 296 | 308 | 315 | 321 |
| PHYSIOLOGY | 504 | 537 | 556 | 539 | 169 | 217 | 266 | 306 |
| ZOOLOGY | 175 | 151 | 129 | 180 | 28 | 32 | 28 | 33 |
| BIOSCIENCES, N.E.C. | 49 | 43 | 117 | 94 | 18 | 29 | 79 | 86 |
| HEALTH SCIENCES | 3,417 | 3,744 | 3,881 | 3,906 | 1,273 | 1,335 | 1,496 | 1,717 |
| DENTISTRY | 195 | 132 | 127 | 157 | 51 | 65 | 59 | 67 |
| NEUROLOGY | 190 | 215 | 246 | 218 | 64 | 86 | 104 | 105 |
| NURSING | 0 | 6 | 14 | 19 | 0 | 0 | 0 | 1 |
| PHARMACEUTICAL SCIENCES | 87 | 110 | 108 | 123 | 151 | 131 | 161 | 195 |
| PREVENTIVE MEDICINE: COMMUNITY HEALTH | 121 | 122 | 131 | 138 | 22 | 24 | 39 | 38 |
| SPEECH PATHOLOGY/AUDIOLOGY | 8 | 16 | 17 | 16 | 2 | 2 | 1 | 2 |
| VETERINARY SCIENCES | 41 | 45 | 68 | 51 | 8 | 5 | 10 | 18 |
| CLINICAL MEDICINE, N.E.C. | 2,700 | 3,006 | 3,075 | 3,084 | 966 | 998 | 1,047 | 1,267 |
| HEALTH RELATED, N.E.C. | 75 | 92 | 93 | 120 | 17 | 24 | 25 | 34 |
| PSYCHOLOGY | 455 | 374 | 376 | 444 | 65 | 61 | 46 | 54 |
| SOCIAL SCIENCES | 186 | 241 | 253 | 241 | 101 | 116 | 104 | 127 |
| AGRICULTURAL ECONOMICS | 14 | 20 | 14 | 21 | 6 | 6 | 4 | 10 |
| ANTHROPOLOGY | 31 | 51 | 48 | 49 | 3 | 9 | 9 | 6 |
| ECONOMICS (EXCEPT AGRICULTURAL) | 4 | 9 | 12 | 10 | 9 | 11 | 14 | 9 |
| GEOGRAPHY | 1 | 0 | 7 | 2 | 4 | 7 | 7 | 8 |
| HISTORY AND PHILOSOPHY OF SCIENCE | 8 | 11 | 5 | 6 | 6 | 8 | 7 | 5 |
| LINGUISTICS | 21 | 22 | 17 | 15 | 26 | 29 | 13 | 11 |
| POLITICAL SCIENCE | 26 | 27 | 14 | 14 | 18 | 16 | 17 | 30 |
| SOCIOLOGY | 72 | 84 | 97 | 70 | 17 | 15 | 17 | 22 |
| SOCIOLOGY/ANTHROPOLOGY | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SOCIAL SCIENCES, N.E.C. | 18 | 17 | 39 | 54 | 11 | 12 | 16 | 22 |

 SOURCE: National Center for Education Statistics, Preliminary Releases, and unpublished data

## TABLE 5-16

WOMEN AS A PERCENT OF TOTAL FULL-TIME INSTRUCTIONAL FACULTY ON 9-MONTH CONTRACTS IN INSTITUTIONS OF HIGHER EDUCATION BY ACADEMIC RANK AND LEVEL OF INSTITUTIONAL UNIT, SELECTED YEARS 1972-73 - 1984-85

| ACADEMIC RANK AND YEAR | All Institutions | PUBLIC | | | | PRIVATE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | Univ. | 4-Yr. Inst. | 2-Yr. Inst. | Total | Univ. | 4-Yr. Inst. | 2-Yr. Inst. |
| ALL RANKS | | | | | | | | | |
| 1972-73 | 22.3 | 22.7 | 17.1 | 23.2 | 32.3 | 21.2 | 14.5 | 23.6 | 45.4 |
| 1974-75 | 24.1 | 24.8 | 19.3 | 24.4 | 32.7 | 23.5 | 16.3 | 25.6 | 44.1 |
| 1976-77 | 25.2 | 25.7 | 18.9 | 24.6 | 34.4 | 23.7 | 17.0 | 26.0 | 42.4 |
| 1979-80 | 25.9 | 26.4 | 20.0 | 26.4 | 34.7 | 24.8 | 18.2 | 27.4 | 48.6 |
| 1980-81 | 26.7 | 26.9 | 19.5 | 25.8 | 35.9 | 26.1 | 19.0 | 28.4 | 47.1 |
| 1981-82 | 27.1 | 27.3 | 19.9 | 26.2 | 36.4 | 26.2 | 19.2 | 28.6 | 46.9 |
| 1982-83* | 26.9 | 27.1 | 19.0 | 26.4 | 36.6 | 26.6 | 20.2 | 28.0 | 45.2 |
| 1984-85* | 27.5 | 27.7 | 20.0* | 29.3 | 37.6 | 27.1 | 19.5* | 31.2 | 45.7 |
| PROFESSORS | | | | | | | | | |
| 1972-73 | 9.8 | 10.0 | 6.7 | 12.7 | 21.2 | 9.5 | 5.4 | 12.3 | 31.5 |
| 1974-75 | 10.3 | 10.5 | 6.6 | 12.7 | 24.7 | 10.1 | 5.6 | 13.0 | 26.6 |
| 1976-77 | 9.6 | 9.7 | 6.2 | 11.8 | 20.8 | 9.2 | 5.6 | 12.0 | 26.4 |
| 1979-80 | 9.8 | 9.7 | 6.4 | 11.8 | 23.5 | 10.1 | 6.0 | 12.7 | 29.6 |
| 1980-81 | 10.6 | 10.6 | 6.2 | 12.3 | 22.9 | 10.6 | 6.5 | 13.4 | 28.9 |
| 1981-82 | 10.8 | 10.8 | 6.4 | 12.5 | 23.0 | 10.7 | 6.6 | 13.3 | 29.7 |
| 1982-83* | 10.7 | 10.7 | 6.3 | 12.7 | 23.6 | 10.6 | 7.0 | 12.6 | 32.9 |
| 1984-85* | 11.4 | 11.5 | 7.0* | 14.7 | 25.7 | 11.2 | 7.1* | 14.7 | 31.4 |
| ASSOCIATE PROFESSORS | | | | | | | | | |
| 1972-73 | 16.3 | 15.8 | 12.3 | 17.4 | 24.3 | 17.2 | 12.9 | 19.1 | 34.3 |
| 1974-75 | 16.9 | 16.1 | 13.3 | 17.0 | 24.7 | 18.6 | 13.5 | 20.8 | 26.6 |
| 1976-77 | 17.6 | 17.3 | 13.8 | 17.7 | 26.6 | 18.3 | 14.4 | 20.0 | 28.5 |
| 1979-80 | 19.4 | 19.1 | 16.2 | 18.9 | 29.4 | 20.3 | 16.6 | 21.6 | 42.7 |
| 1980-81 | 20.6 | 20.4 | 16.7 | 20.3 | 29.8 | 21.1 | 17.6 | 22.4 | 42.3 |
| 1981-82 | 21.5 | 21.3 | 17.6 | 21.0 | 31.7 | 21.9 | 18.8 | 23.0 | 40.7 |
| 1982-83* | 22.0 | 21.9 | 17.9 | 22.0 | 33.0 | 22.3 | 19.4 | 23.3 | 35.8 |
| 1984-85* | 23.5 | 23.3 | 19.4* | 23.2 | 34.6 | 24.2 | 21.6* | 27.0 | 34.2 |
| ASSISTANT PROFESSORS | | | | | | | | | |
| 1972-73 | 23.8 | 23.7 | 20.0 | 24.7 | 31.3 | 24.1 | 19.0 | 25.7 | 41.3 |
| 1974-75 | 27.1 | 27.0 | 24.4 | 27.6 | 33.8 | 27.3 | 22.4 | 28.7 | 43.2 |
| 1976-77 | 30.3 | 30.4 | 27.6 | 30.7 | 35.8 | 30.1 | 26.2 | 31.4 | 46.0 |
| 1979-80 | 33.9 | 33.8 | 31.1 | 34.5 | 38.6 | 34.2 | 30.0 | 35.4 | 52.9 |
| 1980-81 | 35.3 | 35.2 | 31.3 | 35.9 | 40.3 | 35.4 | 30.7 | 37.2 | 51.2 |
| 1981-82 | 35.9 | 35.8 | 31.8 | 36.8 | 40.9 | 36.1 | 30.9 | 40.0 | 51.3 |
| 1982-83* | 36.1 | 35.9 | 30.7 | 37.7 | 41.6 | 36.5 | 32.2 | 37.9 | 49.8 |
| 1984-85* | 37.3 | 37.3 | 32.6* | 37.0 | 43.0 | 37.7 | 31.3* | 41.2 | 50.2 |
| INSTRUCTORS | | | | | | | | | |
| 1972-73 | 39.9 | 39.2 | 44.4 | 44.0 | 35.1 | 42.5 | 41.0 | 41.5 | 53.8 |
| 1974-75 | 40.6 | 39.4 | 49.6 | 47.7 | 34.2 | 46.5 | 44.8 | 46.2 | 51.0 |
| 1976-77 | 50.6 | 61.1 | 53.8 | 51.5 | 48.1 | 49.5 | 48.6 | 49.0 | 59.4 |
| 1979-80 | 51.8 | 52.1 | 55.7 | 52.7 | 47.7 | 51.0 | 48.6 | 51.0 | 57.4 |
| 1980-81 | 52.8 | 58.3 | 56.0 | 53.7 | 50.7 | 51.5 | 49.6 | 51.6 | 56.3 |
| 1981-82 | 53.3 | 54.3 | 56.6 | 54.7 | 52.1 | 51.2 | 47.2 | 51.5 | 59.1 |
| 1982-83* | 51.7 | 52.2 | 54.6 | 52.1 | 50.8 | 50.6 | 50.6 | 50.1 | 56.9 |
| 1984-85* | 50.0 | 49.8 | 56.4* | 49.7 | 45.6 | 50.6 | 48.5* | 53.7 | 52.3 |
| LECTURERS | | | | | | | | | |
| 1972-73 | 34.9 | 35.1 | 30.3 | 40.2 | 51.2 | 34.2 | 29.1 | 38.1 | 52.9 |
| 1974-75 | 39.8 | 39.5 | 36.3 | 43.8 | 50.0 | 40.5 | 35.9 | 46.2 | 91.7 |
| 1976-77 | 40.8 | 41.1 | 40.9 | 39.7 | 54.6 | 39.6 | 36.3 | 43.6 | 87.5 |
| 1979-80 | 44.7 | 45.3 | 44.4 | 46.4 | 46.1 | 45.2 | 42.1 | 46.9 | - |
| 1980-81 | 46.5 | 46.2 | 45.8 | 45.2 | 54.8 | 47.3 | 46.1 | 46.9 | 90.0 |
| 1981-82 | 47.1 | 47.4 | 47.3 | 46.2 | 55.9 | 45.7 | 47.3 | 43.3 | 70.0 |
| 1982-83* | 47.5 | 47.4 | 46.1 | 47.2 | 57.7 | 47.7 | 48.5 | 46.4 | 55.6 |
| 1984-85* | 47.3 | 46.8 | 47.2* | 50.1 | 47.4 | 49.1 | 50.3* | 52.6 | 46.7 |
| NO ACADEMIC RANK | | | | | | | | | |
| 1972-73 | 32.8 | 32.3 | 23.4 | 38.8 | 32.4 | 34.7 | 10.0 | 30.1 | 40.6 |
| 1974-75 | 34.3 | 34.0 | 39.1 | 39.9 | 33.7 | 35.5 | 10.0 | 30.8 | 44.5 |
| 1976-77 | 34.8 | 34.5 | 53.1 | 46.5 | 34.2 | 37.6 | 42.7 | 35.1 | 40.2 |
| 1979-80 | 34.3 | 33.8 | 38.6 | 33.3 | 33.8 | 42.4 | 40.8 | 36.9 | 48.8 |
| 1980-81 | 36.1 | 35.7 | 40.3 | 36.0 | 35.7 | 40.4 | 40.1 | 33.3 | 46.7 |
| 1981-82 | 36.4 | 36.1 | 43.2 | 39.8 | 36.0 | 39.8 | 42.2 | 33.4 | 46.2 |
| 1982-83* | 36.5 | 36.2 | 37.3 | 36.3 | 36.2 | 38.7 | 45.5 | 31.4 | 44.6 |
| 1984-85* | 37.7 | 37.6 | 40.8* | 36.2 | 37.6 | 39.1 | 37.7* | 30.0 | 47.2 |

* Includes both 9- and 12-month contracts. *Doctoral institutions only

SOURCE: Digest of Education Statistics, 1987 Edition, National Center for Statistics

TABLE 5-17

HISTORICAL SUMMARY OF U.S. FACULTY IN HIGHER EDUCATION BY SEX, 1869-70 - 1983-84

| YEAR | Total Inst. | Total Faculty | Men | Women | %W |
|---|---|---|---|---|---|
| 1869-1870 | 563 | 5,553 | 4,887 | 666 | 12.0 |
| 1879-1880 | 811 | 11,522 | 7,328 | 4,194 | 36.4 |
| 1889-1890 | 998 | 15,809 | 12,704 | 3,105 | 19.6 |
| 1899-1900 | 977 | 23,868 | 19,151 | 4,717 | 19.8 |
| 1909-1910 | 951 | 36,480 | 29,132 | 7,348 | 20.1 |
| 1919-1920 | 1,041 | 48,615 | 35,807 | 12,808 | 26.3 |
| 1929-1930 | 1,409 | 82,386 | 60,017 | 22,369 | 27.2 |
| 1939-1940 | 1,708 | 146,929 | 106,328 | 40,601 | 27.6 |
| 1949-1950 | 1,851 | 246,722 | 186,189 | 60,533 | 24.5 |
| 1959-1960 | 2,008 | 380,554 | 296,773 | 83,781 | 22.0 |
| 1969-1970 | 2,525 | 450,000 | 346,000 | 104,000 | 23.1 |
| 1979-1980 | 3,152 | 675,000 | 486,000 | 189,000 | 28.0 |
| 1981-1982 | 3,253 | 696,000 | 496,000 | 200,000 | 28.7 |
| 1983-1984 | 3,284 | 723,000 | 511,000 | 212,000 | 29.3 |

SOURCE: Fact Sheet on Women in Educational Administration compiled by Suzanne Howard, September 1980, Digest of Education Statistics, 1982, and Estimates of School Statistics Series, 1980-1987, National Education Association

TABLE 5-18

WOMEN AS PERCENT OF STAFF IN ELEMENTARY AND SECONDARY EDUCATION

| YEAR | Teachers Elementary | Teachers Secondary | Principals Elementary | Principals Secondary |
|---|---|---|---|---|
| 1928 | | | 55.0 | |
| 1948 | 93.0 | 60.0 | 41.0 | |
| 1965 | | | | 10.0 |
| 1968 | 85.0 | 47.0 | | |
| 1974 | 83.0 | | 13.0 | |
| 1976 | 87.0 | 48.0 | | |
| 1977 | | | | 7.0 |
| 1978 | 83.0 | 46.0 | 18.0 | |
| 1979 | | | | |
| 1980 | 83.0 | 48.0 | | |
| 1981 | 83.1 | 48.9 | | |
| 1983 | 83.4 | 49.4 | | |
| 1984 | 83.5 | 49.7 | | |
| 1985 | 83.5 | 50.1 | | |
| 1986 | 84.0 | 51.4 | | |
| 1987* | 84.2 | 51.7 | | |

* Estimated

SOURCE: National Science Teachers Association, Unpublished Data, 1985-86 Survey of Science and Math Teachers

TABLE 5-19

SCIENCE, MATH AND SOCIAL STUDIES TEACHERS BY GRADE RANGE AND SEX, 1985-86
(Percent)

| | SCIENCE | | MATH | | SOCIAL STUDIES | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 7-8 | 9-12 | 7-8 | 9-12 | 7-8 | 9-12 | 7-8 | 9-12 |
| Number In Sample | 1,297 | 2,252 | 1,349 | 2,481 | 1,138 | 2,106 | 3,724 | 6,839 |
| % Men | 59.2 | 65.4 | 48.2 | 57.7 | 56.8 | 68.8 | 54.4 | 63.7 |
| % Women | 35.2 | 28.3 | 46.4 | 38.4 | 38.0 | 25.7 | 40.1 | 31.2 |
| % Unknown | 5.6 | 6.3 | 5.6 | 4.8 | 5.3 | 5.5 | 5.5 | 5.5 |

SOURCE: 1980 Fact Book for Academic Administrators, American Council on Education and Digest of Education - Statistics, 1981, National Center for Education Statistics and Profile of Women's College Presidents, Women's College Coalition; and American Council on Education, Office of Women in Higher Education, December 1984 and September 1985

## TABLE 5-20

### WOMEN COLLEGE PRESIDENTS BY TYPE AND CONTROL OF INSTITUTION, 1975-1984

| YEAR AND TYPE OF INSTITUTION | | All Institutions Headed by Women | | Public Institutions Headed by Women | | Private Institutions Headed by Women | | Women's Colleges* Headed by Women | | Members of Religious Orders |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | %† | No. | %† | No. | %† | No. | %† | No. |
| 1975 | Total | 148 | 4.8 | 16 | 1.1 | 132 | 8.2 | na | na | 105 |
| | Four-Year | 103 | 5.4 | 5 | 0.9 | 98 | 7.2 | na | na | 79 |
| | Two-Year | 45 | 3.9 | 11 | 1.2 | 34 | 14.2 | na | na | 26 |
| 1976 | Total | 154 | 5.0 | 16 | 1.1 | 138 | 8.6 | 71 | 56.8 | na |
| | Four-Year | 110 | 5.7 | 3 | 0.5 | 107 | 7.8 | 57 | 58.8 | na |
| | Two-Year | 44 | 3.8 | 13 | 1.4 | 31 | 13.0 | 14 | 50.0 | na |
| 1977 | Total | 156 | 5.0 | 19 | 1.3 | 137 | 8.3 | 87 | 71.3 | na |
| | Four-Year | 112 | 5.7 | 5 | 0.9 | 107 | 7.7 | 72 | 75.0 | na |
| | Two-Year | 44 | 3.7 | 14 | 1.5 | 30 | 12.0 | 15 | 57.7 | na |
| 1978 | Total | 177 | 5.6 | 31 | 2.1 | 146 | 8.7 | 75 | 64.1 | na |
| | Four-Year | 123 | 6.3 | 9 | 1.6 | 114 | 8.1 | 62 | 66.7 | na |
| | Two-Year | 54 | 4.5 | 22 | 2.4 | 32 | 11.3 | 13 | 54.2 | na |
| 1980 | Total | 219 | 6.9 | 62 | 4.2 | 157 | 9.4 | 78 | 67.8 | na |
| | Four-Year | 145 | 7.4 | 21 | 3.8 | 124 | 8.8 | 60 | 67.4 | na |
| | Two-Year | 64 | 5.4 | 41 | 4.4 | 33 | 12.3 | 18 | 18.3 | na |
| 1981 | Total | 231 | 7.2 | 72 | 4.8 | 159 | 9.2 | 80 | 70.2 | 98 |
| | Four-Year | 162 | 8.3 | 25 | 4.5 | 135 | 9.5 | 61 | 68.5 | 86 |
| | Two-Year | 69 | 5.4 | 47 | 4.9 | 24 | 7.1 | 19 | 19.4 | 12 |
| 1982 | Total | 244 | 7.5 | 78 | 5.2 | 166 | 9.5 | 84 | 73.7 | 99 |
| | Four-Year | 152 | 8.1 | 25 | 4.5 | 127 | 8.9 | 62 | 69.7 | 73 |
| | Two-Year | 92 | 7.2 | 53 | 5.6 | 39 | 11.6 | 22 | 22.4 | 26 |
| 1983 | Total | 254 | 7.8 | 85 | 5.7 | 169 | 9.6 | 85 | 74.6 | 97 |
| | Four-Year | 152 | 7.7 | 28 | 5.0 | 124 | 8.7 | na | na | |
| | Two-Year | 102 | 8.0 | 57 | 6.1 | 45 | 13.4 | na | na | |
| 1984 | Total | 286 | 8.8 | 104 | 6.9 | 182 | 10.4 | 83 | 74.8 | 95 |
| | Four-Year | 166 | 8.4 | 32 | 5.7 | 134 | 9.4 | na | | na |
| | Two-Year | 120 | 9.4 | 72 | 7.7 | 48 | 14.4 | na | | na |

na Not available in source.

* Institutions with enrollment of at least 90 percent women.

† Institutions headed by women as a percentage of all institutions of the type indicated. Annual directories published by NCES are the source of data concerning the "universe" of institutions by type and control.

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined By National Science Foundation

## TABLE 6-1

PhD DEGREES IN THE PHYSICAL SCIENCES BY SEX AND SUBFIELD (1950 - 1986)

| | | | | Physical Sciences Fields | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Physics | | | | Chemistry | | | | Geology | | | | Other | | | |
| Year | Total | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W |
| 1950 | 1498 | 49 | 3 | 358 | 24 | 5 | 1 | 953 | 64 | 39 | 4 | 113 | 8 | 3 | 3 | 74 | 5 | 2 | 3 |
| 1951 | 1681 | 64 | 4 | 443 | 26 | 8 | 2 | 1046 | 62 | 52 | 5 | 123 | 7 | 3 | 2 | 69 | 4 | 1 | 1 |
| 1952 | 1720 | 57 | 3 | 485 | 28 | 9 | 2 | 1031 | 60 | 45 | 4 | 116 | 7 | 0 | 0 | 88 | 5 | 3 | 3 |
| 1953 | 1714 | 62 | 4 | 478 | 28 | 6 | 1 | 999 | 58 | 51 | 5 | 133 | 8 | 3 | 2 | 104 | 6 | 2 | 2 |
| 1954 | 1686 | 61 | 4 | 485 | 29 | 6 | 1 | 1013 | 60 | 45 | 4 | 136 | 8 | 6 | 4 | 52 | 3 | 4 | 8 |
| 1955 | 1713 | 52 | 3 | 511 | 30 | 12 | 2 | 1005 | 59 | 36 | 4 | 154 | 9 | 2 | 1 | 43 | 3 | 2 | 5 |
| 1956 | 1667 | 68 | 4 | 470 | 28 | 8 | 2 | 986 | 59 | 52 | 5 | 135 | 8 | 1 | 1 | 76 | 5 | 7 | 9 |
| 1957 | 1674 | 71 | 4 | 453 | 27 | 14 | 3 | 1003 | 60 | 48 | 5 | 141 | 8 | 3 | 2 | 77 | 5 | 6 | 8 |
| 1958 | 1655 | 66 | 4 | 464 | 28 | 9 | 2 | 939 | 57 | 49 | 5 | 151 | 9 | 3 | 2 | 101 | 6 | 5 | 5 |
| 1959 | 1812 | 69 | 4 | 482 | 27 | 9 | 2 | 1009 | 56 | 49 | 5 | 198 | 11 | 5 | 3 | 123 | 7 | 6 | 5 |
| 50-59 | 16,820 | 619 | 4 | 4,629 | 28 | 86 | 2 | 9,984 | 59 | 466 | 5 | 1,400 | 8 | 29 | 2 | 807 | 5 | 38 | 5 |
| 1960 | 1838 | 62 | 3 | 487 | 26 | 10 | 2 | 1048 | 57 | 48 | 5 | 201 | 11 | 4 | 2 | 102 | 6 | 0 | 0 |
| 1961 | 1991 | 70 | 4 | 564 | 28 | 6 | 1 | 1131 | 57 | 57 | 5 | 202 | 10 | 3 | 1 | 94 | 5 | 4 | 4 |
| 1962 | 2122 | 87 | 4 | 667 | 31 | 12 | 2 | 1139 | 54 | 69 | 6 | 199 | 9 | 3 | 2 | 117 | 6 | 3 | 3 |
| 1963 | 2380 | 95 | 4 | 752 | 32 | 10 | 1 | 1254 | 53 | 78 | 6 | 265 | 11 | 5 | 2 | 109 | 5 | 2 | 2 |
| 1964 | 2455 | 113 | 5 | 778 | 32 | 11 | 1 | 1301 | 53 | 93 | 7 | 237 | 10 | 5 | 2 | 139 | 6 | 4 | 3 |
| 1965 | 2829 | 127 | 4 | 942 | 33 | 20 | 2 | 1414 | 50 | 101 | 7 | 274 | 10 | 1 | 0 | 199 | 7 | 5 | 3 |
| 1966 | 3045 | 131 | 4 | 973 | 32 | 21 | 2 | 1571 | 52 | 94 | 6 | 290 | 10 | 10 | 3 | 211 | 7 | 6 | 3 |
| 1967 | 3462 | 162 | 5 | 1183 | 34 | 30 | 3 | 1744 | 50 | 118 | 7 | 285 | 8 | 5 | 2 | 250 | 7 | 9 | 4 |
| 1968 | 3593 | 188 | 5 | 1260 | 35 | 26 | 2 | 1757 | 49 | 142 | 8 | 280 | 8 | 6 | 2 | 296 | 8 | 14 | 5 |
| 1969 | 3859 | 206 | 5 | 1296 | 34 | 32 | 2 | 1941 | 50 | 145 | 7 | 314 | 8 | 18 | 6 | 308 | 8 | 11 | 4 |
| 60-69 | 27,574 | 1,241 | 5 | 8,902 | 32 | 178 | 2 | 14,300 | 52 | 945 | 7 | 2,547 | 9 | 60 | 2 | 1825 | 7 | 58 | 3 |
| 1970 | 4313 | 236 | 5 | 1439 | 33 | 37 | 3 | 2208 | 51 | 169 | 8 | 283 | 7 | 9 | 3 | 383 | 9 | 21 | 5 |
| 1971 | 4391 | 246 | 6 | 1482 | 34 | 43 | 3 | 2160 | 49 | 173 | 8 | 324 | 7 | 11 | 3 | 425 | 10 | 19 | 4 |
| 1972 | 4103 | 273 | 7 | 1344 | 33 | 43 | 3 | 1971 | 48 | 193 | 10 | 310 | 8 | 16 | 5 | 478 | 12 | 21 | 4 |
| 1973 | 4016 | 274 | 7 | 1338 | 33 | 51 | 4 | 1882 | 47 | 184 | 10 | 305 | 8 | 12 | 4 | 491 | 12 | 27 | 5 |
| 1974 | 3631 | 253 | 7 | 1115 | 31 | 47 | 4 | 1828 | 50 | 173 | 9 | 315 | 9 | 10 | 3 | 373 | 10 | 23 | 6 |
| 1975 | 3628 | 302 | 8 | 1080 | 30 | 52 | 5 | 1824 | 50 | 205 | 11 | 292 | 8 | 13 | 4 | 432 | 12 | 32 | 7 |
| 1976 | 3433 | 300 | 9 | 997 | 29 | 45 | 5 | 1623 | 47 | 197 | 12 | 313 | 9 | 23 | 7 | 500 | 15 | 35 | 7 |
| 1977 | 3344 | 320 | 10 | 945 | 28 | 55 | 6 | 1571 | 47 | 188 | 12 | 325 | 10 | 23 | 7 | 503 | 15 | 54 | 11 |
| 1978 | 3137 | 312 | 10 | 873 | 28 | 49 | 6 | 1525 | 49 | 203 | 13 | 268 | 9 | 26 | 10 | 471 | 15 | 34 | 7 |
| 1979 | 3104 | 350 | 11 | 918 | 30 | 66 | 7 | 1518 | 49 | 230 | 15 | 286 | 9 | 27 | 9 | 382 | 12 | 27 | 7 |
| 70-79 | 37,100 | 2,866 | 8 | 11,531 | 31 | 488 | 4 | 18,110 | 49 | 1,915 | 11 | 3,021 | 8 | 170 | 6 | 4438 | 12 | 293 | 7 |
| 1980 | 3095 | 386 | 12 | 830 | 27 | 63 | 8 | 1551 | 50 | 260 | 17 | 313 | 10 | 26 | 8 | 401 | 13 | 37 | 9 |
| 1981 | 3141 | 376 | 12 | 866 | 28 | 61 | 7 | 1622 | 52 | 251 | 15 | 284 | 9 | 30 | 11 | 369 | 12 | 34 | 9 |
| 1982 | 3286 | 451 | 14 | 872 | 27 | 66 | 8 | 1722 | 52 | 281 | 16 | 282 | 9 | 50 | 18 | 409 | 12 | 54 | 13 |
| 1983 | 3269 | 458 | 14 | 858 | 26 | 61 | 7 | 1746 | 53 | 295 | 17 | 293 | 9 | 48 | 16 | 372 | 11 | 54 | 15 |
| 1984 | 3298 | 489 | 15 | 953 | 29 | 76 | 8 | 1744 | 53 | 319 | 18 | 315 | 10 | 49 | 16 | 286 | 9 | 45 | 16 |
| 1985 | 3390 | 552 | 16 | 951 | 28 | 84 | 9 | 1789 | 53 | 351 | 20 | 289 | 9 | 55 | 19 | 361 | 11 | 62 | 17 |
| 1986 | 3551 | 588 | 17 | 1010 | 28 | 91 | 9 | 1908 | 54 | 400 | 21 | 215 | 6 | 56 | 26 | 418 | 12 | 41 | 10 |
| 80-86 | 23,030 | 3,300 | 14 | 6,341 | 28 | 502 | 8 | 12,082 | 52 | 2,157 | 18 | 1,991 | 9 | 314 | 16 | 2,616 | 11 | 327 | 13 |
| TOTAL | 104,524 | 8,026 | 8 | 31,403 | 30 | 1,254 | 4 | 54,476 | 52 | 5,483 | 10 | 8,959 | 9 | 573 | 6 | 9,686 | 9 | 716 | 7 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 6-1 (continued)

MASTERS DEGREES IN THE PHYSICAL SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | Total | | | Physical Sciences Fields | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Physics | | | | Chemistry | | | | Geology | | | | Other | | | |
| Year | Phys Sci | Women | %W | No. | %PS | Wom | %W | No. | %PS | Wom | %W | No. | %PS | Wom | %W | No. | %PS | Wom | %W |
| 1950 | 3184 | 265 | 8 | 922 | 29 | 34 | 4 | 1576 | 49 | 208 | 13 | 493 | 15 | 16 | 3 | 193 | 6 | 7 | 4 |
| 1951 | 3200 | 226 | 7 | 973 | 30 | 39 | 4 | 1462 | 46 | 162 | 11 | 565 | 18 | 22 | 4 | 200 | 6 | 3 | 2 |
| 1952 | 3054 | 224 | 7 | 886 | 29 | 35 | 4 | 1409 | 46 | 167 | 12 | 486 | 16 | 17 | 3 | 273 | 9 | 5 | 2 |
| 1953 | 2711 | 164 | 6 | 721 | 27 | 35 | 5 | 1211 | 45 | 116 | 10 | 517 | 19 | 8 | 2 | 262 | 10 | 5 | 2 |
| 1954 | 2374 | 177 | 7 | 714 | 30 | 29 | 4 | 1098 | 46 | 126 | 11 | 412 | 17 | 15 | 4 | 150 | 6 | 7 | 5 |
| 1955 | 2544 | 207 | 8 | 729 | 29 | 28 | 4 | 1173 | 46 | 137 | 12 | 507 | 20 | 26 | 5 | 135 | 5 | 16 | 12 |
| 1956 | 2655 | 220 | 8 | 742 | 28 | 23 | 3 | 1164 | 44 | 129 | 11 | 508 | 19 | 14 | 3 | 241 | 9 | 54 | 22 |
| 1957 | 2704 | 221 | 8 | 825 | 31 | 28 | 3 | 1047 | 39 | 134 | 13 | 567 | 21 | 16 | 3 | 265 | 10 | 43 | 16 |
| 1958 | 3034 | 271 | 9 | 795 | 26 | 25 | 3 | 1125 | 37 | 167 | 15 | 718 | 24 | 21 | 3 | 396 | 13 | 58 | 15 |
| 1959 | 3179 | 270 | 8 | 915 | 29 | 30 | 3 | 1145 | 36 | 164 | 14 | 672 | 21 | 14 | 2 | 447 | 14 | 62 | 14 |
| 50-59 | 28,639 | 2,245 | 8 | 8,222 | 29 | 306 | 4 | 12,410 | 43 | 1,510 | 12 | 5,445 | 19 | 169 | 3 | 2,562 | 9 | 260 | 10 |
| 1960 | 3387 | 327 | 10 | 1073 | 32 | 35 | 3 | 1228 | 36 | 203 | 17 | 591 | 17 | 14 | 2 | 495 | 15 | 75 | 15 |
| 1961 | 3799 | 345 | 9 | 1271 | 33 | 50 | 4 | 1313 | 35 | 200 | 15 | 577 | 15 | 13 | 2 | 638 | 17 | 82 | 13 |
| 1962 | 3929 | 385 | 10 | 1425 | 36 | 62 | 4 | 1425 | 36 | 246 | 17 | 594 | 15 | 21 | 4 | 485 | 12 | 56 | 12 |
| 1963 | 4132 | 428 | 10 | 1567 | 38 | 76 | 5 | 1463 | 35 | 259 | 18 | 561 | 14 | 25 | 4 | 541 | 13 | 68 | 13 |
| 1964 | 4567 | 410 | 9 | 1848 | 40 | 66 | 4 | 1586 | 35 | 280 | 18 | 555 | 12 | 22 | 4 | 578 | 13 | 42 | 7 |
| 1965 | 4918 | 513 | 10 | 1906 | 39 | 80 | 4 | 1715 | 35 | 328 | 19 | 511 | 10 | 25 | 5 | 786 | 16 | 80 | 10 |
| 1966 | 4992 | 528 | 11 | 1949 | 39 | 80 | 4 | 1839 | 37 | 355 | 19 | 525 | 11 | 34 | 6 | 679 | 14 | 59 | 9 |
| 1967 | 5412 | 553 | 10 | 2111 | 39 | 96 | 5 | 1831 | 34 | 347 | 19 | 600 | 11 | 36 | 6 | 870 | 16 | 74 | 9 |
| 1968 | 5508 | 635 | 12 | 2088 | 38 | 95 | 5 | 2014 | 37 | 418 | 21 | 655 | 12 | 50 | 8 | 751 | 14 | 72 | 10 |
| 1969 | 5911 | 668 | 11 | 2259 | 38 | 120 | 5 | 2070 | 35 | 381 | 18 | 675 | 11 | 61 | 9 | 907 | 15 | 106 | 12 |
| 60-69 | 46,555 | 4,792 | 10 | 17,497 | 38 | 760 | 4 | 16,484 | 35 | 3,017 | 18 | 5,844 | 13 | 301 | 5 | 6,730 | 14 | 714 | 11 |
| 1970 | 5948 | 847 | 14 | 2205 | 37 | 158 | 7 | 2146 | 36 | 480 | 22 | 610 | 10 | 67 | 11 | 987 | 17 | 142 | 14 |
| 1971 | 6386 | 853 | 13 | 2194 | 34 | 152 | 7 | 2284 | 36 | 492 | 22 | 651 | 10 | 63 | 10 | 1257 | 20 | 146 | 12 |
| 1972 | 6307 | 888 | 14 | 2035 | 32 | 159 | 8 | 2259 | 36 | 505 | 22 | 841 | 13 | 90 | 11 | 1172 | 19 | 134 | 11 |
| 1973 | 6274 | 847 | 14 | 1755 | 28 | 113 | 6 | 2230 | 36 | 467 | 21 | 827 | 13 | 85 | 10 | 1462 | 23 | 182 | 12 |
| 1974 | 6087 | 887 | 15 | 1662 | 27 | 136 | 8 | 2138 | 35 | 474 | 22 | 938 | 15 | 99 | 11 | 1349 | 22 | 178 | 13 |
| 1975 | 5830 | 848 | 15 | 1577 | 27 | 124 | 8 | 2006 | 34 | 416 | 21 | 932 | 16 | 116 | 12 | 1315 | 23 | 192 | 15 |
| 1976 | 5485 | 825 | 15 | 1451 | 26 | 132 | 9 | 1796 | 33 | 383 | 21 | 1003 | 18 | 130 | 13 | 1235 | 23 | 180 | 15 |
| 1977 | 5345 | 887 | 17 | 1319 | 25 | 126 | 10 | 1775 | 33 | 448 | 25 | 1047 | 20 | 121 | 12 | 1204 | 23 | 192 | 16 |
| 1978 | 5576 | 946 | 17 | 1294 | 23 | 123 | 10 | 1882 | 34 | 445 | 24 | 1239 | 22 | 213 | 17 | 1161 | 21 | 165 | 14 |
| 1979 | 5464 | 992 | 18 | 1319 | 24 | 135 | 10 | 1765 | 32 | 447 | 25 | 1300 | 24 | 242 | 19 | 1080 | 20 | 168 | 16 |
| 70-79 | 58,702 | 8,820 | 15 | 16,811 | 29 | 1,358 | 8 | 20,281 | 35 | 4,557 | 22 | 9,388 | 16 | 1,226 | 13 | 12,222 | 21 | 1,679 | 14 |
| 1980 | 5233 | 975 | 19 | 1192 | 23 | 118 | 10 | 1733 | 33 | 447 | 26 | 1295 | 25 | 237 | 18 | 1013 | 19 | 173 | 17 |
| 1981 | 5284 | 1084 | 21 | 1294 | 24 | 115 | 9 | 1654 | 31 | 470 | 28 | 1396 | 26 | 320 | 23 | 940 | 18 | 179 | 19 |
| 1982 | 5514 | 1196 | 22 | 1284 | 23 | 156 | 12 | 1751 | 32 | 492 | 28 | 1540 | 28 | 344 | 22 | 939 | 17 | 204 | 22 |
| 1983 | 5277 | 1131 | 21 | 1351 | 26 | 158 | 12 | 1622 | 31 | 460 | 28 | 1552 | 29 | 353 | 23 | 752 | 14 | 160 | 21 |
| 1984 | 5550 | 1304 | 23 | 1532 | 28 | 192 | 13 | 1667 | 30 | 530 | 32 | 1514 | 27 | 365 | 24 | 837 | 15 | 217 | 26 |
| 1985 | 5782 | 1340 | 23 | 1523 | 26 | 190 | 12 | 1719 | 30 | 557 | 32 | 1682 | 29 | 409 | 24 | 858 | 15 | 184 | 21 |
| 1986 | 5896 | 1429 | 24 | 1501 | 25 | 224 | 15 | 1754 | 30 | 595 | 34 | 1767 | 30 | 407 | 23 | 874 | 15 | 203 | 23 |
| 80-86 | 38,536 | 8,459 | 22 | 9,677 | 25 | 1,153 | 11 | 11,900 | 31 | 3,551 | 30 | 10,746 | 28 | 2,435 | 23 | 6,213 | 16 | 1,320 | 21 |
| TOTAL | 166,536 | 22,887 | 14 | 50,706 | 30 | 3,353 | 7 | 59,321 | 36 | 12,040 | 20 | 29,656 | 18 | 3,724 | 13 | 26,853 | 16 | 3,770 | 14 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 6-1 (continued)

BACHELORS DEGREES IN THE PHYSICAL SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | Physical Sciences Fields | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Physics | | | | Chemistry | | | | Geology | | | | Other | | | |
| Year | Total Phys Sci | Women | %W | No. | %P/S | Wom | %W | No. | %P/S | Wom | %W | No. | %P/S | Wom | %W | No. | %P/S | Wom | %W |
| 1950 | 17725 | 1737 | 10 | 3414 | 19 | 127 | 4 | 10619 | 60 | 1485 | 14 | 3043 | 17 | 109 | 4 | 649 | 4 | 16 | 2 |
| 1951 | 14276 | 1420 | 10 | 2788 | 20 | 117 | 4 | 8258 | 58 | 1222 | 15 | 2717 | 19 | 74 | 3 | 533 | 4 | 7 | 1 |
| 1952 | 12145 | 1332 | 11 | 2247 | 19 | 106 | 5 | 6819 | 56 | 1102 | 16 | 2102 | 17 | 76 | 4 | 977 | 8 | 48 | 5 |
| 1953 | 10414 | 1277 | 12 | 2005 | 19 | 84 | 4 | 5943 | 57 | 1073 | 18 | 1719 | 17 | 68 | 4 | 747 | 7 | 52 | 7 |
| 1954 | 9880 | 1273 | 13 | 1952 | 20 | 75 | 4 | 5791 | 59 | 1064 | 18 | 1632 | 17 | 79 | 5 | 505 | 5 | 55 | 11 |
| 1955 | 10516 | 1382 | 13 | 1996 | 19 | 76 | 4 | 5920 | 56 | 1139 | 19 | 1795 | 17 | 92 | 5 | 805 | 8 | 75 | 9 |
| 1956 | 11672 | 1501 | 13 | 2335 | 20 | 102 | 4 | 6178 | 53 | 1182 | 19 | 2163 | 19 | 78 | 4 | 996 | 9 | 139 | 14 |
| 1957 | 12934 | 1613 | 12 | 2745 | 21 | 122 | 4 | 6591 | 51 | 1294 | 20 | 2570 | 20 | 89 | 3 | 1028 | 8 | 108 | 11 |
| 1958 | 14352 | 1667 | 12 | 3186 | 22 | 144 | 5 | 7010 | 49 | 1305 | 19 | 2827 | 20 | 104 | 4 | 1329 | 9 | 116 | 9 |
| 1959 | 15460 | 1766 | 11 | 3809 | 25 | 141 | 4 | 7308 | 47 | 1411 | 19 | 2878 | 19 | 91 | 3 | 1465 | 9 | 123 | 8 |
| 50-59 | 129,394 | 14,970 | 12 | 26,477 | 20 | 1,094 | 4 | 70,437 | 54 | 12,277 | 17 | 23,446 | 18 | 860 | 4 | 9,034 | 7 | 739 | 8 |
| 1960 | 16057 | 2016 | 13 | 4338 | 27 | 172 | 4 | 7603 | 47 | 1598 | 21 | 2465 | 15 | 75 | 3 | 1651 | 10 | 171 | 10 |
| 1961 | 15500 | 2008 | 13 | 4322 | 28 | 230 | 5 | 7604 | 49 | 1508 | 20 | 1870 | 12 | 77 | 4 | 1704 | 11 | 193 | 11 |
| 1962 | 15894 | 2146 | 14 | 4812 | 30 | 188 | 4 | 8089 | 51 | 1715 | 21 | 1430 | 9 | 69 | 5 | 1563 | 10 | 174 | 11 |
| 1963 | 16276 | 2238 | 14 | 4785 | 29 | 237 | 5 | 8823 | 54 | 1768 | 20 | 1087 | 7 | 64 | 6 | 1581 | 10 | 169 | 11 |
| 1964 | 17527 | 2450 | 14 | 4956 | 28 | 241 | 5 | 9724 | 55 | 1914 | 20 | 1113 | 6 | 94 | 8 | 1734 | 10 | 201 | 12 |
| 1965 | 17916 | 2532 | 14 | 4954 | 28 | 246 | 5 | 10047 | 56 | 1936 | 19 | 1131 | 6 | 119 | 11 | 1784 | 10 | 231 | 13 |
| 1966 | 17186 | 2333 | 14 | 4609 | 27 | 224 | 5 | 9735 | 57 | 1801 | 19 | 1329 | 8 | 127 | 10 | 1513 | 9 | 181 | 12 |
| 1967 | 17794 | 2402 | 13 | 4733 | 27 | 267 | 6 | 9872 | 55 | 1771 | 18 | 1458 | 8 | 163 | 11 | 1731 | 10 | 201 | 12 |
| 1968 | 19442 | 2674 | 14 | 5045 | 26 | 296 | 6 | 10847 | 56 | 1965 | 18 | 1718 | 9 | 178 | 10 | 1832 | 9 | 235 | 13 |
| 1969 | 21591 | 2952 | 14 | 5535 | 26 | 322 | 6 | 11807 | 55 | 2156 | 18 | 2014 | 9 | 205 | 10 | 2235 | 10 | 269 | 12 |
| 60-69 | 175,183 | 23,751 | 14 | 48 089 | 27 | 2,423 | 5 | 94,151 | 54 | 18,132 | 19 | 15,615 | 9 | 1,171 | 7 | 17,328 | 10 | 2,025 | 12 |
| 1970 | 21551 | 2969 | 14 | 5333 | 25 | 329 | 6 | 11617 | 54 | 2116 | 18 | 2286 | 11 | 246 | 11 | 2315 | 11 | 278 | 12 |
| 1971 | 21549 | 3014 | 14 | 5076 | 24 | 343 | 7 | 11183 | 52 | 2095 | 19 | 2415 | 11 | 265 | 11 | 2875 | 13 | 311 | 11 |
| 1972 | 20887 | 3148 | 15 | 4645 | 22 | 323 | 7 | 10721 | 51 | 2120 | 20 | 2573 | 12 | 326 | 13 | 2948 | 14 | 379 | 13 |
| 1973 | 20809 | 3121 | 15 | 4268 | 21 | 313 | 7 | 10226 | 49 | 1967 | 19 | 2929 | 14 | 389 | 13 | 3386 | 16 | 452 | 13 |
| 1974 | 21287 | 3536 | 17 | 3962 | 19 | 337 | 9 | 10525 | 49 | 2112 | 20 | 3256 | 15 | 533 | 16 | 3544 | 17 | 554 | 16 |
| 1975 | 20896 | 3838 | 18 | 3716 | 18 | 362 | 10 | 10649 | 51 | 2385 | 22 | 3324 | 16 | 575 | 17 | 3207 | 15 | 516 | 16 |
| 1976 | 21559 | 4139 | 19 | 3544 | 16 | 388 | 11 | 11107 | 52 | 2497 | 22 | 3362 | 16 | 606 | 18 | 3546 | 16 | 648 | 18 |
| 1977 | 22618 | 4551 | 20 | 3420 | 15 | 358 | 10 | 11322 | 50 | 2602 | 23 | 3879 | 17 | 836 | 22 | 3997 | 18 | 755 | 19 |
| 1978 | 23175 | 4987 | 22 | 3330 | 14 | 369 | 11 | 11474 | 50 | 2881 | 25 | 4344 | 19 | 958 | 22 | 4027 | 17 | 779 | 19 |
| 1979 | 23363 | 5287 | 23 | 3338 | 14 | 399 | 12 | 11643 | 50 | 3113 | 27 | 4503 | 19 | 1058 | 23 | 3879 | 17 | 717 | 18 |
| 70-79 | 217,694 | 38,590 | 18 | 40,632 | 19 | 3,521 | 9 | 110,467 | 51 | 23,888 | 22 | 32,871 | 15 | 5,792 | 18 | 33,724 | 15 | 5,389 | 16 |
| 1980 | 23661 | 5651 | 24 | 3397 | 14 | 434 | 13 | 11446 | 48 | 3277 | 29 | 4600 | 19 | 1131 | 25 | 4218 | 18 | 809 | 19 |
| 1981 | 23952 | 5888 | 25 | 3441 | 14 | 432 | 13 | 11347 | 47 | 3394 | 30 | 5202 | 22 | 1303 | 25 | 3962 | 17 | 759 | 19 |
| 1982 | 24052 | 6186 | 26 | 3472 | 14 | 460 | 13 | 11062 | 46 | 3491 | 32 | 5538 | 23 | 1415 | 26 | 3980 | 17 | 820 | 21 |
| 1983 | 23234 | 6350 | 27 | 3793 | 16 | 482 | 13 | 10796 | 46 | 3630 | 34 | 6102 | 26 | 1568 | 26 | 2543 | 11 | 670 | 26 |
| 1984 | 23525 | 6487 | 28 | 3907 | 17 | 557 | 14 | 10704 | 46 | 3731 | 35 | 6549 | 28 | 1615 | 25 | 2365 | 10 | 584 | 25 |
| 1985 | 23597 | 6586 | 28 | 4097 | 17 | 559 | 14 | 10482 | 44 | 3791 | 36 | 6308 | 27 | 1558 | 25 | 2710 | 11 | 678 | 25 |
| 1986 | 21620 | 5927 | 27 | 4180 | 19 | 611 | 15 | 10116 | 47 | 3633 | 36 | 4974 | 23 | 1103 | 22 | 2350 | 11 | 580 | 25 |
| 80-86 | 163,641 | 43,075 | 26 | 26,287 | 11 | 3,535 | 13 | 75,953 | 46 | 24,947 | 33 | 39,273 | 24 | 9,693 | 25 | 22,128 | 14 | 4,900 | 22 |
| TOTAL | 685,912 | 120,386 | 17 | 141,485 | 21 | 10,573 | 7 | 351,008 | 52 | 79,244 | 22 | 111,205 | 16 | 17,516 | 15 | 82,214 | 12 | 13,053 | 15 |

FIELD: Physical Sciences

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report,NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council, 1981-1987

## TABLE 6-2

### NUMBER OF Ph.D. RECIPIENTS IN THE PHYSICAL SCIENCES* BY TYPE OF CITIZENSHIP, 1960-1986

| YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship Not Known |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 1,861 | 1,619 | 229 | 51 | 178 | 13 |
| 1961 | 1,993 | 1,696 | 269 | 48 | 221 | 28 |
| 1962 | 2,097 | 1,812 | 262 | 32 | 230 | 23 |
| 1963 | 2,428 | 2,045 | 333 | 55 | 278 | 50 |
| 1964 | 2,527 | 2,130 | 343 | 74 | 269 | 54 |
| 1965 | 2,865 | 2,418 | 411 | 85 | 326 | 36 |
| 1966 | 3,059 | 2,526 | 446 | 88 | 358 | 87 |
| 1967 | 3,504 | 2,891 | 540 | 124 | 416 | 73 |
| 1968 | 3,671 | 3,073 | 527 | 130 | 397 | 71 |
| 1969 | 3,919 | 3,251 | 581 | 170 | 411 | 87 |
| 1970 | 4,404 | 3,631 | 709 | 275 | 434 | 64 |
| 1971 | 4,501 | 3,689 | 737 | 330 | 407 | 75 |
| 1972 | 4,233 | 3,348 | 819 | 373 | 446 | 66 |
| 1973 | 4,021 | 3,098 | 856 | 348 | 508 | 67 |
| 1974 | 3,709 | 2,743 | 809 | 302 | 507 | 157 |
| 1975 | 3,631 | 2,734 | 813 | 269 | 544 | 84 |
| 1976 | 3,442 | 2,619 | 765 | 247 | 518 | 58 |
| 1977 | 3,410 | 2,623 | 720 | 213 | 507 | 67 |
| 1978 | 3,234 | 2,494 | 670 | 206 | 464 | 70 |
| 1979 | 3,321 | 2,570 | 685 | 199 | 486 | 66 |
| 1980 | 3,151 | 2,393 | 682 | 176 | 506 | 76 |
| 1981 | 3,208 | 2,419 | 683 | 160 | 523 | 106 |
| 1982 | 3,348 | 2,511 | 733 | 146 | 587 | 104 |
| 1983 | 3,438 | 2,544 | 794 | 149 | 645 | 100 |
| 1984 | 3,459 | 2,546 | 913 | 142 | 671 | 100 |
| 1985 | 3,531 | 2,549 | 902 | 166 | 736 | 80 |
| 1986 | 3,679 | 2,574 | 1,020 | 158 | 862 | 85 |

*Physics, Astronomy, Chemistry, and Environmental Sciences

FIELD: Physical Sciences

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, 1987

## TABLE 6-3

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN THE PHYSICAL SCIENCES BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES TOTAL | WOMEN | % W | TOTAL MINORITY TOTAL | % | WOMEN | % W | BLACK No. | % B | HISPANIC No. | % H | ASIAN No. | % A | AM. INDIAN No. | % I | WHITE No. | % W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Physical Science | 5555 | 687 | 12.4 | 390 | 7.0 | 75 | 19.2 | 192 | 3.5 | 64 | 1.2 | 124 | 2.2 | 10 | 0.2 | 5165 | 93.0 |
| Health Physics | 590 | 87 | 14.7 | 60 | 10.2 | 13 | 21.7 | 28 | 4.7 | 10 | 1.7 | 21 | 3.6 | 1 | 0.2 | 530 | 89.8 |
| Physics | 4226 | 209 | 4.9 | 286 | 6.8 | 30 | 10.5 | 61 | 1.4 | 52 | 1.2 | 165 | 3.9 | 8 | 0.2 | 3940 | 93.2 |
| Geophysics | 666 | 76 | 11.4 | 41 | 6.2 | 3 | 7.3 | 9 | 1.4 | 10 | 1.5 | 20 | 3.0 | 2 | 0.3 | 625 | 93.8 |
| Hydrology | 2382 | 261 | 11.0 | 120 | 5.0 | 26 | 21.7 | 22 | 0.9 | 47 | 2.0 | 45 | 1.9 | 6 | 0.3 | 2262 | 95.0 |
| Chemistry | 7827 | 1777 | 22.7 | 1351 | 17.3 | 428 | 31.7 | 510 | 6.5 | 154 | 2.0 | 671 | 8.6 | 16 | 0.2 | 6476 | 82.7 |
| Metallurgy | 381 | 17 | 4.5 | 48 | 12.6 | 3 | 6.3 | 4 | 1.0 | 11 | 2.9 | 33 | 8.7 | 0 | 0.0 | 333 | 87.4 |
| Astronomy & Space Science | 508 | 32 | 6.3 | 21 | 4.1 | 1 | 4.8 | 5 | 1.0 | 4 | 0.8 | 10 | 2.0 | 2 | 0.4 | 487 | 95.9 |
| Meteorology | 2229 | 134 | 6.0 | 192 | 8.6 | 33 | 17.2 | 69 | 3.1 | 45 | 2.0 | 73 | 3.3 | 5 | 0.2 | 2037 | 91.4 |
| Geology | 2988 | 523 | 17.5 | 126 | 4.2 | 27 | 21.4 | 24 | 0.8 | 38 | 1.3 | 42 | 1.4 | 22 | 0.7 | 2862 | 95.8 |
| Oceanography | 818 | 105 | 12.8 | 63 | 7.7 | 13 | 20.6 | 31 | 3.8 | 10 | 1.2 | 19 | 2.3 | 3 | 0.4 | 755 | 92.3 |
| Cartography | 4901 | 905 | 18.5 | 575 | 11.7 | 140 | 24.3 | 376 | 7.7 | 143 | 2.9 | 42 | 0.9 | 14 | 0.3 | 4326 | 88.3 |
| Geodesy | 385 | 55 | 14.3 | 37 | 9.6 | 12 | 32.4 | 22 | 5.7 | 9 | 2.3 | 6 | 1.6 | 0 | 0.0 | 348 | 90.4 |
| Land Surveying | 518 | 13 | 2.5 | 24 | 4.6 | 0 | 0.0 | 0 | 0.0 | 10 | 1.9 | 1 | 0.2 | 13 | 2.5 | 494 | 95.4 |
| Forest Products Technology | 89 | 4 | 4.5 | 5 | 5.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 5.6 | 0 | 0.0 | 84 | 94.4 |
| Food Technology | 184 | 48 | 26.1 | 21 | 11.4 | 6 | 28.6 | 7 | 3.8 | 3 | 1.6 | 11 | 6.0 | 0 | 0.0 | 163 | 88.6 |
| Textile Technology | 46 | 39 | 40.6 | 4 | 4.2 | 1 | 25.0 | 4 | 4.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 92 | 95.8 |
| Photographic Technology | 58 | 1 | 1.7 | 4 | 6.9 | 0 | 0.0 | 1 | 1.7 | 3 | 5.2 | 0 | 0.0 | 0 | 0.0 | 54 | 93.1 |
| TOTALS | 34401 | 4973 | 14.5 | 3368 | 9.8 | 811 | 24.1 | 1365 | 4.0 | 613 | 1.8 | 1288 | 3.7 | 102 | 0.3 | 31033 | 90.2 |

FIELD: Biochemistry

SOURCE: Doctorates Awarded from 1920 to 1971 by Subfield of Doctorate, Sex and Decade and Doctorate Recipients from United States Universities, Summary Reports 1971-1984, National Research Council

TABLE 6-4

DOCTORAL DEGREES BY SEX, 1920-1984

| | Total Both Sexes | Women Only | % Women |
|---|---|---|---|
| CY 1920 thru FY 1959* | 3,544 | 484 | 13.7 |
| FY 1960 thru FY 1969 | 4,241 | 713 | 16.8 |
| FY 1970 thru FY 1972 | 1,815 | 322 | 17.7 |
| FY 1973 | 636 | 129 | 20.3 |
| FY 1974 | 606 | 147 | 24.3 |
| FY 1975 | 620 | 147 | 23.7 |
| FY 1976 | 616 | 141 | 22.9 |
| FY 1977 | 608 | 135 | 22.2 |
| FY 1978 | 607 | 146 | 24.0 |
| FY 1979 | 600 | 156 | 26.0 |
| FY 1980 | 672 | 188 | 28.0 |
| FY 1981 | 644 | 189 | 29.3 |
| FY 1982 | 650 | 166 | 25.5 |
| FY 1983 | 646 | 194 | 30.0 |
| FY 1984 | 606 | 191 | 31.5 |
| FY 1985 | 579 | 184 | 31.8 |
| FY 1986 | 571 | 194 | 34.0 |
| TOTAL | 18,261 | 3,808 | 20.9 |

*Data are aggregated on a calendar year (CY) basis from 1920 to 1957 and on a fiscal year (FY) basis from 1958 (July 1, 1957 to June 30, 1958) to the present.

SOURCE: Earned Degrees Conferred Series, 1947-48 thru 1985-86, U.S. Office of Education (NCES)

TABLE 6-5

DEGREES AWARDED BY SEX AND LEVEL OF DEGEE, 1947-48 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | |
|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1947-48 thru 1959-60 | 1,965 | 284 | 14.4 | 1,748 | 394 | 22.1 |
| 1960-61 thru 1969-70 | 2,509 | 673 | 26.8 | 2,235 | 685 | 30.6 |
| 1970-71 | 568 | 138 | 24.3 | 251 | 99 | 39.4 |
| 1971-72 | 699 | 175 | 25.0 | 252 | 90 | 35.7 |
| 1972-73 | 872 | 195 | 22.4 | 270 | 74 | 27.4 |
| 1973-74 | 1,101 | 254 | 23.1 | 249 | 65 | 26.1 |
| 1974-75 | 1,355 | 359 | 26.5 | 270 | 77 | 28.5 |
| 1975-76 | 1,622 | 480 | 29.6 | 254 | 72 | 28.3 |
| 1976-77 | 1,693 | 495 | 29.2 | 314 | 104 | 34.2 |
| 1977-78 | 1,752 | 517 | 29.5 | 319 | 105 | 32.9 |
| 1978-79 | 1,799 | 591 | 32.9 | 301 | 131 | 43.5 |
| 1979-80 | 1,686 | 596 | 35.4 | 268 | 98 | 36.6 |
| 1980-81 | 1,837 | 656 | 35.7 | 258 | 90 | 34.9 |
| 1981-82 | 1,865 | 668 | 35.8 | 273 | 104 | 38.1 |
| 1982-83* | 1,876 | 716 | 38.2 | 270 | 105 | 38.9 |
| 1983-84 | 2,052 | 843 | 41.1 | 254 | 109 | 42.9 |
| 1984-85 | 2,111 | 850 | 40.3 | 257 | 115 | 44.7 |
| 1985-86 | 2,103 | 867 | 41.1 | 279 | 114 | 40.9 |
| TOTAL | 29,381 | 9,357 | 31.8 | 8,322 | 2,631 | 31.6 |

*Includes Biophysics, beginning in 1982-83

FIELD: Chemistry

SOURCE: American Chemical Society, Committee on Professional Training

TABLE 6-6

CHEMISTRY GRADUATES BY DEGREE LEVEL AND SEX, 1971-1986

| YEAR | B.S. (ACS Certified) | | | B.S. (Not Cerified) | | | M.S. | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| 1971 | 3,708 | 592 | 16.0 | 4,248 | 744 | 17.5 | 1,941 | 443 | 22.8 | 2,097 | 117 | 8.4 |
| 1972 | 3,424 | 587 | 17.1 | 4,484 | 819 | 18.3 | 2,019 | 470 | 23.3 | 1,929 | 207 | 10.7 |
| 1973 | 3,835 | 687 | 17.9 | 4,225 | 7545 | 17.9 | 2,005 | 439 | 21.9 | 1,880 | 182 | 9.7 |
| 1974 | 3,844 | 758 | 19.7 | 4,868 | 948 | 19.5 | 1,867 | 430 | 23.0 | 1,732 | 181 | 10.4 |
| 1975 | 3,897 | 794 | 20.4 | 5,187 | 1,110 | 21.4 | 1,814 | 401 | 22.1 | 1,781 | 208 | 11.7 |
| 1976 | 4,103 | 855 | 20.8 | 5,813 | 1,332 | 22.9 | 1,676 | 373 | 22.3 | 1,622 | 202 | 12.5 |
| 1977 | 4,219 | 949 | 22.3 | 5,988 | 1,355 | 22.6 | 1,688 | 403 | 23.9 | 1,563 | 189 | 12.1 |
| 1978 | 4,260 | 995 | 23.4 | 6,090 | 1,540 | 25.3 | 1,798 | 434 | 24.1 | 1,532 | 214 | 14.0 |
| 1979 | 4,424 | 1,107 | 25.0 | 6,027 | 1,691 | 28.1 | 1,716 | 448 | 26.1 | 1,532 | 243 | 15.9 |
| 1980 | 4,170 | 1,152 | 27.6 | 6,000 | 1,658 | 27.6 | 1,698 | 419 | 24.7 | 1,561 | 274 | 17.6 |
| 1981 | 4,337 | 1,223 | 28.2 | 6,116 | 1,805 | 29.5 | 1,609 | 451 | 28.0 | 1,613 | 255 | 15.8 |
| 1982 | 4,179 | 1,284 | 30.7 | 5,687 | 1,721 | 30.3 | 1,645 | 491 | 29.8 | 1,683 | 272 | 16.2 |
| 1983 | 4,233 | 1,391 | 32.9 | 5,810 | 1,921 | 33.1 | 1,569 | 444 | 28.3 | 1,759 | 300 | 17.1 |
| 1984 | 4,201 | 1,420 | 33.8 | 5,618 | 1,952 | 34.7 | 1,637 | 544 | 33.2 | 1,777 | 331 | 18.6 |
| 1985 | 4,021 | 1,417 | 35.2 | 5,658 | 1,999 | 35.3 | 1,621 | 524 | 32.3 | 1,806 | 359 | 19.9 |
| 1986 | 3,892 | 1,380 | 35.5 | 5,403 | 1,967 | 36.4 | 1,620 | 564 | 34.8 | 1,885 | 389 | 20.6 |

FIELD: Chemistry

SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from U.S. Universities, Summary Reports 1967-86, National Research Council

## TABLE 6-7

PHD AWARDS IN CHEMISTRY BY SUBFIELD AND SEX, 1960-86

| | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| Subfields | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| CHEMISTRY Total | 14586 | 933 | 6.4 | 18201 | 1893 | 10.4 | 10190 | 1743 | 17.1 | 1836 | 362 | 19.7 | 1903 | 396 | 20.8 |
| Agricultural & Food(1) | 428 | 24 | 5.6 | 211 | 35 | 16.6 | | | | | | | | | |
| Analytical | 1043 | 69 | 6.6 | 1609 | 127 | 7.9 | 1381 | 220 | 15.9 | 285 | 62 | 21.8 | 257 | 46 | 17.9 |
| Inorganic | 1575 | 128 | 8.1 | 2401 | 298 | 12.4 | 1302 | 244 | 18.7 | 251 | 47 | 18.7 | 260 | 62 | 23.8 |
| Nuclear | 272 | 13 | 4.8 | 244 | 22 | 9.0 | 84 | 11 | 13.1 | 7 | 1 | 14.3 | 18 | 2 | 11.1 |
| Organic | 5986 | 333 | 5.6 | 6131 | 504 | 8.2 | 3018 | 435 | 14.4 | 493 | 79 | 16.0 | 510 | 96 | 18.8 |
| Pharmaceutical | 470 | 18 | 3.8 | 552 | 63 | 11.4 | 353 | 77 | 21.8 | 60 | 15 | 25.0 | 58 | 17 | 29.3 |
| Physical | 3480 | 270 | 6.8 | 4101 | 483 | 11.8 | 1825 | 350 | 19.2 | 304 | 70 | 23.0 | 293 | 71 | 24.2 |
| Polymer | | | | 310 | 18 | 5.8 | 382 | 53 | 13.9 | 84 | 14 | 16.7 | 72 | 12 | 16.7 |
| Theoretical | 294 | 24 | 8.2 | 528 | 67 | 12.7 | 245 | 38 | 15.5 | 48 | 7 | 14.6 | 41 | 6 | 14.6 |
| Chemistry, General | 305 | 31 | 10.2 | 1405 | 183 | 13.0 | 1099 | 189 | 17.2 | 214 | 45 | 21.0 | 290 | 52 | 17.9 |
| Chemistry, Other | 233 | 23 | 9.9 | 709 | 93 | 13.1 | 501 | 126 | 25.1 | 90 | 22 | 24.4 | 104 | 32 | 30.8 |

(1) Deleted in 1980

## TABLE 6-8

CHEMISTRY PH.D. AWARDS BY CITIZENSHIP AND VISA STATUS, 1967-86

| YEAR | TOTAL | CITIZENSHIP (percent) | | | U.S. + | TEMPORARY VISA | |
|---|---|---|---|---|---|---|---|
| | | Foreign | U.S. | Unknown | Perm. Visa | No. Stay in U.S. | |
| 1967 | 1,773 | 15.1 | 82.9 | 1.8 | 1,472 | 301 | 151 |
| 1968 | 1,782 | 12.9 | 85.0 | 2.0 | | | |
| 1969 | 1,967 | 14.2 | 84.2 | 1.5 | 1,685 | 282 | 122 |
| 1970 | 2,223 | 15.2 | 83.8 | 0.9 | | | |
| 1971 | 2,211 | 15.7 | 83.3 | 1.0 | 1,888 | 323 | 108 |
| 1972 | 2,011 | 18.4 | 79.8 | 1.8 | | | |
| 1973 | 1,855 | 19.7 | 78.6 | 1.7 | 1,574 | 281 | 119 |
| 1974 | 1,792 | 19.8 | 78.5 | 1.7 | | | |
| 1975 | 1,776 | 19.4 | 78.5 | 2.1 | 1,454 | 322 | 154 |
| 1976 | 1,623 | 20.9 | 77.6 | 1.5 | | | |
| 1977 | 1,571 | 19.4 | 78.8 | 1.8 | 1,342 | 199 | 145 |
| 1978 | 1,545 | 21.7 | 75.9 | 2.4 | 1,293 | 215 | |
| 1979 | 1,335 | 19.3 | 79.1 | 1.5 | 1,335 | 208 | 155 |
| 1980 | 1,538 | 21.8 | 75.7 | 2.4 | 1,264 | 237 | |
| 1981 | 1,611 | 20.5 | 76.5 | 2.9 | 1,326 | 238 | 184 |
| 1982 | 1,678 | 20.7 | 76.2 | 3.1 | 1,362 | 264 | |
| 1983 | 1,759 | 20.0 | 77.0 | 3.0 | 1,424 | 283 | 221 |
| 1984 | 1,765 | 21.5 | 75.5 | 3.0 | 1,414 | 298 | |
| 1985 | 1,836 | 22.7 | 73.2 | 4.6 | 1,431 | 330 | |
| 1986 | 1,903 | 25.6 | 69.3 | 5.1 | 1,412 | 393 | |

SOURCE: Salaries 1987, American Chemical Society, September 1987

## TABLE 6-9

DISTRIBUTION OF NON-ACADEMIC ACS MEMBER CHEMISTS BY AGE, HIGHEST DEGREE AND SEX, 1987

| AGE LEVEL | BACHELOR'S | | MASTER'S | | DOCTOR'S | |
|---|---|---|---|---|---|---|
| | % Men | % Women | % Men | % Women | % Men | % Women |
| 20 - 24 | 3.8 | 11.4 | 0.3 | 1.5 | 0.0 | 0.0 |
| 25 - 29 | 17.7 | 30.4 | 8.9 | 17.6 | 4.1 | 11.6 |
| 30 - 34 | 17.4 | 20.7 | 15.0 | 22.1 | 14.4 | 24.5 |
| 35 - 39 | 11.3 | 11.9 | 17.2 | 16.3 | 15.5 | 16.7 |
| 40 - 44 | 8.2 | 7.8 | 13.9 | 13.5 | 18.0 | 13.8 |
| 45 - 49 | 10.0 | 8.0 | 11.3 | 10.4 | 15.4 | 15.2 |
| 50 - 54 | 8.5 | 2.2 | 10.5 | 7.4 | 12.3 | 6.0 |
| 55 - 59 | 11.6 | 3.7 | 12.5 | 5.3 | 10.8 | 5.3 |
| 60 - 64 | 8.7 | 3.2 | 7.1 | 4.3 | 6.8 | 5.3 |
| 65 - 69 | 2.7 | 0.6 | 3.1 | 1.5 | 2.5 | 1.6 |
| 70 and over | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 |

FIELD: Chemistry

SOURCE: 1976, and 1978 Report of Chemists' Salaries and Employment Status and Salaries 1981, 1983, 1985 and 1987 , Office of Manpower Studies, American Chemical Society, July 1976, June 1978, July 1981, June 1983, October 1985, and September 1987

## TABLE 6-10

DISTRIBUTION OF ACS CHEMISTS BY DEGREE AND MINORITY CLASSIFICATION, 1976, 1983, 1985 AND 1987

| MINORITY CLASSIFICATION | 1976 | | | | 1983 | | | | 1985** | | | | 1987 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B.S. | M.S. | Ph.D. | Total | B.S. | M.S. | Ph.D. | Total | B.S. | M.S. | Ph.D. | Total | B.S. | M.S. | Ph.D. | Total |
| Black | 1.2 | 1.8 | 1.0 | 1.2 | 1.8 | 1.6 | 1.0 | 1.3 | 1.4 | 1.3 | 0.7 | 1.1 | 1.7 | 1.0 | 0.9 | 1.1 |
| American Indian | 0.2 | 0.0 | 0.2 | 0.2 | 0.4 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.5 | 0.4 | 0.4 | 0.4 |
| Asian | 2.1 | 2.8 | 4.2 | 3.3 | 3.0 | 4.5 | 8.1 | 6.0 | 2.7 | 5.1 | 8.4 | 5.8 | 2.3 | 5.0 | 7.3 | 5.7 |
| Hispanic | 0.7 | 0.8 | 0.5 | 0.6 | 1.0 | 1.1 | 0.8 | 0.9 | 1.2 | 1.0 | 0.7 | 0.9 | 1.2 | 0.9 | 0.9 | 1.0 |
| All Minorities | 4.2 | 5.4 | 5.9 | 5.3 | 6.2 | 7.2 | 10.0 | 8.4 | 6.3 | 8.4 | 10.7 | 8.7 | 6.2 | 8.0 | 10.1 | 8.8 |
| Non-Minority | 95.8 | 94.6 | 94.1 | 94.7 | 92.6 | 61.6 | 88.8 | 90.2 | 92.9 | 90.6 | 88.2 | 90.2 | 93.8 | 92.0 | 89.9 | 91.2 |

** Includes only non-academic ACS members who responded to the survey.

## TABLE 6-11

DISTRIBUTION OF ACS CHEMISTS BY SEX AND MINORITY CLASSIFICATION, 1976, 1978, 1981, 1983, 1985 and 1987*

| MINORITY CLASSIFICATION | 1976 | | 1978 | | 1981 | | | 1983 | | | 1985 | | | 1987 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total |
| Black | 1.0 | 2.8 | 1.0 | 1.3 | 0.9 | 3.6 | 1.2 | 1.1 | 2.4 | 1.3 | 0.9 | 1.8 | 1.1 | 1.1 | 1.5 | 1.2 |
| American Indian | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.4 |
| Asian | 3.0 | 6.9 | 4.5 | 6.2 | 5.2 | 6.7 | 5.3 | 5.9 | 6.7 | 6.0 | 5.6 | 6.4 | 5.7 | 5.6 | 6.1 | 5.7 |
| Hispanic | 0.6 | 0.9 | 0.7 | 0.9 | 0.6 | 0.9 | 0.6 | 0.8 | 1.2 | 0.9 | 0.8 | 1.2 | 0.9 | 1.0 | 1.0 | 1.0 |
| All Minorities | 4.8 | 10.7 | 6.3 | 8.5 | 7.6 | 12.2 | 8.8 | 8.0 | 10.4 | 8.4 | 8.4 | 10.2 | 8.7 | 8.7 | 9.2 | 8.8 |
| Non-Minority | 95.2 | 89.3 | 93.6 | 91.6 | 92.4 | 87.8 | 91.2 | 91.0 | 88.8 | 90.2 | 90.7 | 89.2 | 90.3 | 91.3 | 90.8 | 91.2 |

* Includes only ACS members who responded to survey.

Note: Totals may not add to 100% due to no responses

FIELD: Chemistry

SOURCE: Salaries 1985, American Chemical Society, October 1985

## TABLE 6-12

ACS MEMBER CHEMISTS EMPLOYED FULL TIME IN PRIVATE INDUSTRY BY WORK FUNCTION, HIGHEST DEGREE AND SEX, 1985

| WORK FUNCTION | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| Management R&D | 581 | 45 | 7.7 | 455 | 50 | 11.0 | 1,959 | 69 | 3.5 |
| Basic Research | 437 | 162 | 37.1 | 360 | 103 | 28.6 | 1,498 | 127 | 8.5 |
| Applied R&D | 1,925 | 393 | 20.4 | 1,441 | 261 | 18.1 | 3,769 | 282 | 7.5 |
| Gen. Management | 463 | 48 | 10.4 | 280 | 31 | 11.1 | 300 | 13 | 4.3 |
| Marketing | 630 | 81 | 12.9 | 332 | 37 | 11.1 | 255 | 15 | 5.9 |
| Prod. & Qual. Control | 1,414 | 321 | 22.7 | 498 | 75 | 15.1 | 272 | 17 | 6.3 |
| Forensic | 322 | 92 | 28.6 | 129 | 24 | 18.6 | 99 | 10 | 10.1 |
| Writing/Editing | 58 | 36 | 62.1 | 54 | 31 | 57.4 | 39 | 11 | 28.2 |
| Data Processing | 10 | 2 | 20.0 | 17 | 4 | 23.5 | 15 | 0 | 0.0 |
| Consulting | 91 | 13 | 14.3 | 78 | 5 | 6.4 | 92 | 6 | 6.5 |
| Other | 238 | 73 | 30.7 | 136 | 26 | 19.1 | 134 | 14 | 10.4 |
| **TOTAL** | **6,169** | **1,266** | **20.5** | **3,780** | **647** | **17.1** | **8,432** | **564** | **6.7** |

SOURCE: Salaries 1985, American Chemical Society, October 1985

## TABLE 6-13

ACS MEMBER CHEMISTS EMPLOYED FULL TIME IN PRIVATE INDUSTRY BY WORK SPECIALTY, HIGHEST DEGREE AND SEX, 1985

| WORK SPECIALTY | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| Biochemistry | 115 | 47 | 40.9 | 119 | 34 | 28.6 | 485 | 62 | 12.8 |
| Agric./Food | 238 | 47 | 19.4 | 164 | 29 | 7.7 | 416 | 25 | 6.0 |
| Analytical | 2,198 | 537 | 24.4 | 1,129 | 209 | 18.5 | 1,409 | 127 | 9.0 |
| Environmental | 412 | 78 | 18.9 | 250 | 40 | 16.0 | 303 | 28 | 9.2 |
| Organic | 797 | 150 | 18.8 | 569 | 96 | 37.1 | 1,673 | 82 | 4.9 |
| Inorganic | 228 | 33 | 14.5 | 133 | 24 | 18.0 | 542 | 35 | 6.5 |
| Pharmaceutical | 298 | 88 | 29.5 | 230 | 60 | 26.1 | 468 | 45 | 9.6 |
| Med./Clinical | 104 | 39 | 37.5 | 120 | 32 | 26.7 | 433 | 36 | 8.3 |
| Physical | 188 | 31 | 16.5 | 118 | 21 | 17.8 | 785 | 47 | 6.0 |
| General | 348 | 52 | 14.9 | 147 | 20 | 13.6 | 175 | 12 | 6.9 |
| Polymer | 1,083 | 144 | 13.3 | 735 | 77 | 10.5 | 1,871 | 105 | 5.6 |
| Other | 275 | 67 | 24.4 | 185 | 39 | 21.1 | 357 | 22 | 6.2 |
| **TOTAL** | **6,284** | **1,313** | **20.9** | **3,899** | **681** | **17.5** | **8,917** | **626** | **7.0** |

FIELD: Chemistry

SOURCE: Women Chemists 1985, American Chemical Society

TABLE 6-14

## ACADEMIC PHD CHEMISTS EMPLOYED FULL TIME BY RANK, TYPE OF INSTITUTION AND SEX, 1985

| | All Institutions | | Medical/ Prof School | | Doctorate University | | Masters Institution | | Bachelor's Institution | | Associate Institution | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Total | 6190 | | 711 | | 2796 | | 745 | | 1463 | | 475 | |
| Women | 782 | 12.6 | 117 | 16.5 | 260 | 9.3 | 80 | 10.7 | 224 | 15.3 | 101 | 21.3 |
| Men | 5408 | 87.4 | 594 | 83.5 | 2536 | 90.7 | 665 | 89.3 | 1239 | 84.7 | 374 | 78.7 |
| Professor | 3017 | | 255 | | 1450 | | 450 | | 720 | | 142 | |
| Women | 166 | 5.5 | 16 | 6.3 | 42 | 2.9 | 25 | 5.6 | 52 | 7.2 | 31 | 21.8 |
| Men | 2851 | 94.5 | 239 | 93.7 | 1408 | 97.1 | 425 | 94.4 | 668 | 92.8 | 111 | 78.2 |
| Asso. Prof. | 1257 | | 143 | | 479 | | 150 | | 385 | | 100 | |
| Women | 172 | 13.7 | 22 | 15.4 | 44 | 9.2 | 15 | 10.0 | 74 | 19.2 | 17 | 17.0 |
| Men | 1085 | 86.3 | 121 | 84.6 | 435 | 90.8 | 135 | 90.0 | 311 | 80.8 | 83 | 83.0 |
| Asst. Prof. | 887 | | 95 | | 385 | | 102 | | 264 | | 41 | |
| Women | 162 | 18.3 | 20 | 21.1 | 44 | 11.4 | 24 | 23.5 | 64 | 24.2 | 10 | 24.4 |
| Men | 725 | 81.7 | 75 | 78.9 | 341 | 88.6 | 78 | 76.5 | 200 | 75.8 | 31 | 75.6 |
| Instructor | 390 | | 70 | | 167 | | 30 | | 75 | | 48 | |
| Women | 123 | 31.5 | 20 | 28.6 | 43 | 25.7 | 11 | 36.7 | 30 | 40.0 | 19 | 39.6 |
| Men | 267 | 68.5 | 50 | 71.4 | 124 | 74.3 | 19 | 63.3 | 45 | 60.0 | 29 | 60.4 |
| Res. Asso. | 417 | | 94 | | 305 | | 9 | | 8 | | 1 | |
| Women | 127 | 30.5 | 35 | 37.2 | 86 | 28.2 | 3 | 33.3 | 3 | 37.5 | 0 | 0.0 |
| Men | 290 | 69.5 | 59 | 62.8 | 219 | 71.8 | 6 | 66.7 | 5 | 62.5 | 1 | 100.0 |
| Unranked | 222 | | 54 | | 10 | | 4 | | 11 | | 143 | |
| Women | 32 | 14.4 | 4 | 7.4 | 1 | 10.0 | 2 | 50.0 | 1 | 9.1 | 24 | 16.8 |
| Men | 190 | 85.6 | 50 | 92.6 | 9 | 90.0 | 2 | 50.0 | 10 | 90.9 | 119 | 83.2 |

SOURCE: Women Chemists 1985, American Chemical Society

TABLE 6-15

## TENURE STATUS OF CHEMISTS IN PROFESSORIAL RANKS, BY TYPE OF INSTITUTION AND SEX, 1985

| | Doctorate University | | | Master's Institution | | | Bachelor's Institution | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Tenured | %T | Total | Tenured | %T | Total | Tenured | %T |
| Total | 2796 | 2299 | 82.2 | 745 | 680 | 91.3 | 1463 | 1311 | 89.6 |
| Women | 260 | 124 | 47.7 | 80 | 59 | 73.8 | 224 | 176 | 78.6 |
| Men | 2536 | 2175 | 85.8 | 665 | 621 | 93.4 | 1239 | 1135 | 91.6 |
| Professor | 1450 | 1448 | 99.9 | 450 | 443 | 98.4 | 720 | 712 | 98.9 |
| Women | 42 | 42 | 100.0 | 25 | 24 | 96.0 | 52 | 52 | 100.0 |
| Men | 1408 | 1406 | 99.9 | 425 | 419 | 98.6 | 668 | 660 | 98.8 |
| Asso. Prof. | 479 | 472 | 98.5 | 150 | 142 | 94.7 | 385 | 356 | 92.5 |
| Women | 44 | 41 | 93.2 | 15 | 14 | 93.3 | 74 | 68 | 91.9 |
| Men | 435 | 431 | 99.1 | 135 | 128 | 94.8 | 311 | 288 | 92.6 |
| Asst. Prof. | 385 | 379 | 98.4 | 102 | 95 | 93.1 | 264 | 243 | 92.0 |
| Women | 44 | 41 | 93.2 | 24 | 21 | 87.5 | 64 | 56 | 87.5 |
| Men | 341 | 338 | 99.1 | 78 | 74 | 94.9 | 200 | 187 | 93.5 |

SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 6-16

PHD AWARDS IN PHYSICS AND ASTRONOMY BY SUBFIELD AND SEX, 1960-86

| | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| Subfields | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| PHYSICS & ASTRONOMY Total | 9836 | 213 | 2.2 | 13617 | 574 | 4.2 | 6213 | 479 | 7.7 | 1078 | 102 | 9.5 | 1187 | 109 | 9.2 |
| Astronomy(1) | 36 | 2 | 5.6 | 614 | 53 | 8.6 | 289 | 42 | 14.5 | 43 | 5 | 11.6 | 52 | 4 | 7.7 |
| Astrophysics(1) | 67 | 5 | 7.5 | 657 | 30 | 4.6 | 356 | 36 | 10.1 | 57 | 6 | 10.5 | 57 | 5 | 8.8 |
| Astronomy/astrophysics(1) | 435 | 28 | 6.4 | | | | | | | | | | | | |
| Acoustics | 94 | 0 | 0.0 | 150 | 3 | 2.0 | 92 | 8 | 8.7 | 10 | 3 | 30.0 | 15 | 2 | 13.3 |
| Atomic & Molecular | 1029 | 21 | 2.0 | 1191 | 36 | 3.0 | 437 | 30 | 6.9 | 58 | 6 | 10.3 | 70 | 6 | 8.6 |
| Electron(2) | | | | | | | 7 | 1 | 14.3 | 4 | 1 | 25.0 | 2 | 0 | 0.0 |
| Electromagnetism(3) | 232 | 3 | 1.3 | 115 | 2 | 1.7 | | | | | | | | | |
| Elementary particle | 1561 | 35 | 2.2 | 1749 | 72 | 4.1 | 783 | 36 | 4.6 | 154 | 8 | 5.2 | 147 | 11 | 7.5 |
| Fluids | 277 | 8 | 2.9 | 201 | 7 | 3.5 | 84 | 9 | 10.7 | 16 | 1 | 6.3 | 6 | 2 | 33.3 |
| Mechanics(4) | 63 | 0 | 0.0 | 37 | 2 | 5.4 | | | | | | | | | |
| Nuclear(5) | 1586 | 25 | 1.6 | 1699 | 69 | 3.3 | 437 | 36 | 8.2 | 86 | 7 | 8.1 | 89 | 8 | 9.0 |
| Optics | 103 | 2 | 1.9 | 336 | 6 | 1.8 | 292 | 19 | 6.5 | 50 | 9 | 18.0 | 58 | 9 | 15.5 |
| Plasma | 63 | 0 | 0.0 | 724 | 18 | 2.5 | 393 | 15 | 3.8 | 55 | 3 | 5.5 | 61 | 3 | 4.9 |
| Polymer(2) | | | | | | | 29 | 3 | 10.3 | 11 | 3 | 27.3 | 11 | 3 | 27.3 |
| Solid state | 2530 | 39 | 1.5 | 3336 | 143 | 4.3 | 1417 | 111 | 7.8 | 248 | 19 | 7.7 | 280 | 29 | 10.4 |
| Theoretical physics(6) | 260 | 3 | 1.2 | | | | | | | | | | | | |
| Thermal(7) | 123 | 4 | 3.3 | 122 | 5 | 4.1 | 12 | | 0.0 | | | | | | |
| Physics, General | 598 | 18 | 3.0 | 1730 | 88 | 5.1 | 992 | 63 | 6.4 | 176 | 10 | 5.7 | 222 | 18 | 8.1 |
| Physics, Other | 779 | 20 | 2.6 | 1358 | 60 | 4.4 | 593 | 70 | 11.8 | 110 | 21 | 19.1 | 117 | 9 | 7.7 |

(1) 'Astronomy/astrophysics' were combined until 1969. (2) Subfield introduced in 1983. (3) Originally 'Electricity and magnetism', then 'Electromagnetism' in 1966. Subfield deleted in 1980. (4) Deleted in 1977. (5) 'Nuclear structure' until 1983. (6) Deleted in 1962. (7) 'Heat (Thermal)' in 1960, 'Thermal phenomena' in 1963, 'Thermal physics' in 1967, deleted in 1982.

FIELD: Astronomy and Astrophysics

SOURCE: Earned Degrees Conferred Series, 1947-48 thru 1985-86, Department of Education Center for Statistics

## TABLE 6-17

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1947-48 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | |
|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1947-48 thru 1959-60 | 286 | 60 | 21.0 | 197 | 25 | 12.7 |
| 1960-61 thru 1969-70 | 841 | 117 | 13.9 | 667 | 81 | 12.1 |
| 1970-71 | 102 | 8 | 7.8 | 100 | 12 | 12.0 |
| 1971-72 | 139 | 23 | 16.5 | 89 | 11 | 12.3 |
| 1972-73 | 110 | 23 | 20.9 | 89 | 11 | 12.4 |
| 1973-74 | 152 | 33 | 21.7 | 82 | 11 | 13.4 |
| 1974-75 | 115 | 20 | 17.4 | 110 | 14 | 12.7 |
| 1975-76 | 116 | 15 | 12.9 | 81 | 7 | 8.6 |
| 1976-77 | 122 | 19 | 15.6 | 68 | 14 | 20.6 |
| 1977-78 | 110 | 24 | 21.8 | 84 | 12 | 14.3 |
| 1978-79 | 93 | 20 | 21.5 | 97 | 15 | 15.5 |
| 1979-80 | 96 | 16 | 16.7 | 70 | 9 | 12.9 |
| 1980-81 | 98 | 19 | 19.4 | 51 | 7 | 13.7 |
| 1981-82 | 81 | 16 | 19.8 | 61 | 10 | 16.4 |
| 1982-83 | 75 | 20 | 26.7 | 58 | 11 | 19.0 |
| 1983-84 | 94 | 20 | 21.3 | 67 | 10 | 14.9 |
| 1984-85 | 111 | 22 | 19.8 | 91 | 15 | 16.5 |
| 1985-86 | 130 | 20 | 15.4 | 83 | 11 | 13.31 |
| TOTAL | 2,871 | 495 | 17.2 | 2,147 | 286 | 13.3 |

FIELD: Physics and Astronomy

SOURCE: Summary Report: Doctorate Recipients from United States Universities, Series, 1967 through 1986, National Research Council

**TABLE 6-18**

PHYSICS AND ASTRONOMY PH.D. AWARDS BY CITIZENSHIP AND VISA STATUS, 1967-86

| YEAR | TOTAL | CITIZENSHIP (percent) | | | U.S. + | TEMPORARY VISA | |
|---|---|---|---|---|---|---|---|
| | | Foreign | U.S. | Unknown | Perm. Visa | No. | Stay U.S. |
| 1967 | 1,312 | 17.3 | 80.0 | 2.6 | 1,058 | 254 | 110 |
| 1968 | 1,422 | 15.1 | 81.9 | 2.9 | | | |
| 1969 | 1,461 | 15.2 | 82.2 | 2.4 | 1,183 | 278 | 95 |
| 1970 | 1,657 | 17.2 | 80.7 | 2.0 | | | |
| 1971 | 1,738 | 18.3 | 79.0 | 2.6 | 1,363 | 375 | 117 |
| 1972 | 1,635 | 20.2 | 78.2 | 1.6 | | | |
| 1973 | 1,589 | 23.4 | 74.5 | 1.9 | 1,254 | 335 | 157 |
| 1974 | 1,334 | 25.2 | 72.8 | 2.0 | | | |
| 1975 | 1,300 | 27.0 | 71.2 | 1.8 | 988 | 312 | 166 |
| 1976 | 1,235 | 24.5 | 73.4 | 2.0 | | | |
| 1977 | 1,150 | 25.6 | 72.2 | 2.2 | 916 | 208 | 145 |
| 1978 | 1,066 | 23.0 | 75.3 | 1.7 | 867 | 181 | |
| 1979 | 1,108 | 25.0 | 72.2 | 2.8 | 870 | 207 | 144 |
| 1980 | 985 | 24.4 | 72.8 | 2.8 | 768 | 189 | |
| 1981 | 1,015 | 24.9 | 70.4 | 4.6 | 768 | 200 | 156 |
| 1982 | 1,013 | 27.3 | 69.6 | 3.1 | 740 | 242 | |
| 1983 | 1,042 | 29.5 | 67.9 | 2.6 | 759 | 256 | 182 |
| 1984 | 1,080 | 27.9 | 68.4 | 3.6 | 775 | 266 | |
| 1985 | 1,078 | 31.3 | 64.6 | 4.2 | 744 | 289 | |
| 1986 | 1,187 | 34.1 | 58.3 | 7.6 | 732 | 365 | |

FIELD: Physics

SOURCE: Graduate Student Survey, American Institute of Physics, AIP Pub. R-207.14, 1982; R-207.16, 1984, R-207.18, 1986, and R-207.19, 1987.

## TABLE 6-19

GRADUATE PHYSICS STUDENTS BY MINORITY GROUP AND SEX, 1980-81, 1982-83, 1984-85 AND 1985-86

| MINORITY GROUP | 1980-1981 | | | 1982-1983 | | | 1984-1985 | | | 1985-86 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % MINORITY | TOTAL | WOMEN | % MINORITY | TOTAL | WOMEN | % MINORITY | TOTAL | WOMEN | % MINORITY |
| Black | 94 | 10 | 1.4 | 78 | 9 | 1.2 | 77 | 11 | 1.2 | 85 | 9 | 1.7 |
| U.S. | 70 | 10 | 1.1 | 46 | 7 | 0.7 | 42 | 8 | 0.6 | 56 | 8 | 0.8 |
| Foreign | 24 | 0 | 0.4 | 32 | 2 | 0.5 | 35 | 3 | 0.5 | 29 | 1 | 0.4 |
| American Indian | 12 | 2 | 0.2 | 9 | 1 | 0.1 | 12 | 3 | 0.2 | 15 | 4 | 0.2 |
| Puerto Rican | 21 | 3 | 0.3 | 17 | 2 | 0.3 | 18 | 6 | 0.3 | 16 | 3 | 0.2 |
| Mexican American | 15 | 0 | 0.2 | 11 | 2 | 0.2 | 16 | 2 | 0.2 | 14 | 2 | 0.2 |
| Other Hispanic | 139 | 12 | 2.1 | 167 | 11 | 2.6 | 159 | 21 | 2.4 | 130 | 13 | 1.9 |
| U.S. | 18 | 2 | 0.3 | 23 | 1 | 0.4 | 44 | 6 | 0.7 | 40 | 3 | 0.6 |
| Foreign | 121 | 10 | 1.9 | 144 | 10 | 2.2 | 115 | 15 | 1.8 | 90 | 10 | 1.3 |
| Asian Indian | 360 | 66 | 5.5 | 351 | 68 | 5.5 | 374 | 70 | 5.7 | 406 | 94 | 6.0 |
| Oriental | 700 | 94 | 10.8 | 934 | 139 | 14.5 | 1,250 | 175 | 19.2 | 1,362 | 207 | 20.0 |
| U.S. | 88 | 15 | 1.4 | 87 | 16 | 1.4 | 101 | 16 | 1.5 | 111 | 19 | 1.6 |
| Foreign | 612 | 79 | 9.4 | 847 | 123 | 13.2 | 1,149 | 159 | 17.6 | 1,251 | 188 | 18.4 |
| Arab | 171 | 12 | 2.6 | 210 | 27 | 3.3 | 180 | 16 | 2.8 | 172 | 21 | 2.5 |
| Total Minority | 1,512 | 199 | 23.3 | 1,777 | 259 | 27.6 | 2,086 | 304 | 32.0 | 2,200 | 353 | 32.4 |
| Total Respondents | 6,498 | 650 | | 6,442 | 709 | | 6,525 | 783 | | 6,790 | 883 | |
| Total Population* | 9,934 | | | 10,429 | | | 11,337 | | | 12,011 | | |

*All numbers except total population are numbers of respondents. All percentages are calculated on resondents.

SOURCE: Enrollments and Degrees, American Institute of Physics, June 1987, AIP Pub No. R-151.24

## TABLE 6-20

PHYSICS DEGREES AWARDED BY LEVEL, SEX AND RACE/ETHNICITY, 1985-86

| Type of degrees | Sex | Total no. of degrees | Black | Native American Indian | Hispanic | Oriental | Asian Indian | Arab |
|---|---|---|---|---|---|---|---|---|
| Bachelor's | Men | 4494 | 162 | 15 | 50 | 117 | 37 | 37 |
| | Women | 720 | 29 | 3 | 8 | 29 | 13 | 1 |
| | Total | 5214 | 191 | 18 | 58 | 146 | 50 | 38 |
| Master's enroute | Men | 762 | 6 | 3 | 11 | 146 | 46 | 22 |
| | Women | 108 | 7 | 0 | 0 | 29 | 12 | 6 |
| | Total | 870 | 13 | 3 | 11 | 175 | 58 | 28 |
| Terminal master's | Men | 600 | 23 | 4 | 12 | 59 | 27 | 19 |
| | Women | 113 | 2 | 1 | 0 | 14 | 13 | 3 |
| | Total | 713 | 25 | 5 | 12 | 73 | 40 | 22 |
| Doctorate | Men | 958 | 7 | 2 | 27 | 108 | 47 | 24 |
| | Women | 93 | 2 | 0 | 0 | 10 | 15 | 7 |
| | Total | 1051 | 9 | 2 | 27 | 118 | 62 | 31 |

*Minorities in AIP surveys are defined as groups with a low representation in the physics community, but ones whose participation has aroused considerable interest.

FIELD: Physics and Astronomy

SOURCE: Graduate Student Survey, American Institute of Physics, AIP Pub. No. R-207.18, 1986 and R-207.19, 1987

## TABLE 6-21

CHARACTERISTICS OF THE GRADUATE PHYSICS STUDENT POPULATION, 1984-85 and 1985-86

| CHARACTERISTICS | ALL GRADUATE STUDENTS | FIRST-YEAR GRADUATE STUDENTS | DEGREE RECIPIENTS | |
|---|---|---|---|---|
| | | | TERMINAL MASTERS | DOCTORATE RECIPIENTS |
| 1984-85 | | | | |
| Total Population | 11,337 | 2,863 | 629 | 972 |
| Number of Respondents | 6,525 | 1,303 | 269 | 605 |
| Percent Women | 12% | 13% | 13% | 8% |
| Percent Men | 88% | 87% | 87% | 92% |
| Percent U.S. Citizenship | 64% | 61% | 80% | 69% |
| Percent Foreign Citizenship | 36% | 39% | 20% | 31% |
| 1985-86 | | | | |
| Total Population | 12,011 | 2,981 | 704 | 1,051 |
| Number of Respondents | 6,790 | 1,347 | 277 | 623 |
| Percent Women | 13% | 15% | 16% | 9% |
| Percent Men | 87% | 85% | 84% | 91% |
| Percent U.S. Citizenship | 62% | 58% | 81% | 66% |
| Percent Foreign Citizenship | 38% | 42% | 19% | 84% |

## TABLE 6-22

CHARACTERISTICS OF THE GRADUATE ASTRONOMY STUDENT POPULATION, 1984-85 and 1985-86

| CHARACTERISTICS | ALL GRAD. STUDENTS | % M | % W | FIRST-YEAR GRAD. STUDENTS | % M | % W | DOCTORATE RECIPIENTS | % M | % W |
|---|---|---|---|---|---|---|---|---|---|
| 1984-85 | | | | | | | | | |
| Total Population | 716 | | | 151 | | | 66 | | |
| No. of Respondents | 406 | 81 | 19 | 80 | 75 | 25 | 55 | 87 | 13 |
| Citizenship | | | | | | | | | |
| U.S. | 78% | | | 72% | | | 89% | | |
| Foreign | 22% | | | 28% | | | 11% | | |
| 1985-86 | | | | | | | | | |
| Total Population | 711 | | | 170 | | | 86 | | |
| No. of Respondents | 486 | 81 | 19 | 107 | 78 | 22 | 48 | 93 | 7 |
| Citizenship | | | | | | | | | |
| U.S. | 76% | | | 69% | | | 83% | | |
| Foreign | 24% | | | 31% | | | 17% | | |

SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 6-23

PHD AWARDS IN EARTH, ATMOSPHERIC AND MARINE SCIENCES BY SUBFIELD AND SEX, 1960-86

| Subfields | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL | 3526 | 69 | 11.7 | 6171 | 385 | 6.2 | 3736 | 537 | 14.4 | 617 | 111 | 18.0 | 589 | 100 | 17.0 |
| Atmospheric Phy & Chem | | | | 69 | 4 | 5.8 | 99 | 4 | 4.0 | 16 | 1 | 6.3 | 21 | 3 | 14.3 |
| Atmospheric Dynamics | | | | 93 | 5 | 5.4 | 131 | 11 | 8.4 | 21 | 1 | 4.8 | 16 | 2 | 12.5 |
| Meteorology(9) | 310 | 4 | 1.3 | 375 | 11 | 2.9 | 67 | 4 | 6.0 | 22 | 2 | 9.1 | 27 | 2 | 7.4 |
| Atmos & Met Sci, Gen(2) | | | | | | | 31 | 2 | 6.5 | 10 | 0 | 0.0 | 7 | 0 | 0.0 |
| Atmos & Met Sci, Other | | | | 145 | 13 | 9.0 | 159 | 12 | 7.5 | 10 | 0 | 0.0 | 7 | 1 | 14.3 |
| Geology(5) | | | | | | | 340 | 60 | 17.6 | 111 | 21 | 18.9 | 118 | 23 | 19.5 |
| Structural Geology(5) | 194 | 4 | 2.1 | 216 | 12 | 5.6 | 72 | 8 | 11.1 | | | | | | |
| Geochemistry(4) | 41 | 3 | 7.3 | 481 | 39 | 8.1 | 289 | 46 | 15.9 | 48 | 11 | 22.9 | 37 | 7 | 18.9 |
| Geophysics & Seismology(6) | | | | 254 | 20 | 7.9 | 458 | 42 | 9.2 | 91 | 13 | 14.3 | 89 | 18 | 20.2 |
| Geophysics(6) | 316 | 1 | 0.3 | 483 | 14 | 2.9 | | | | | | | | | |
| Paleontology | 339 | 9 | 2.7 | 369 | 44 | 11.9 | 139 | 26 | 18.7 | 23 | 5 | 21.7 | 16 | 7 | 43.8 |
| Minerology, Petrology(6) | 50 | 6 | 12.0 | 472 | 30 | 6.4 | 198 | 39 | 19.7 | 28 | 10 | 35.7 | 17 | 4 | 23.5 |
| Fuel Tech & Petro Eng(1) | 23 | | 0.0 | 82 | 4 | 4.9 | | | | | | | | | |
| Mineral, Petrol, Geochem(6) | 755 | 20 | 2.6 | | | | | | | | | | | | |
| Stratigraphy, Sediment | 572 | 4 | 0.7 | 485 | 26 | 5.4 | 193 | 31 | 16.1 | 23 | 5 | 21.7 | 14 | 0 | 0.0 |
| Geomorph & Glacial Geology | 115 | 4 | 3.5 | 228 | 8 | 3.5 | 81 | 14 | 17.3 | 13 | 1 | 7.7 | 11 | 2 | 18.2 |
| Applied Geology(1) | 27 | 1 | 3.7 | 237 | 5 | 2.1 | 96 | 4 | 4.2 | 8 | | 0.0 | 4 | 1 | 25.0 |
| Applied geo, geo eng(1) | 233 | 1 | 0.4 | | | | | | | | | | | | |
| Geological Sciences, Gen(10) | | | | | | | 36 | 10 | 27.8 | 11 | 5 | 45.5 | 12 | 1 | 8.3 |
| Geological Sciences, Oth(10) | | | | | | | 57 | 9 | 15.8 | 11 | 3 | 27.3 | 12 | 4 | 33.3 |
| Earth Sciences, General(10) | 121 | 5 | 4.1 | 372 | 17 | 4.6 | 131 | 12 | 9.2 | | | | | | |
| Earth Sciences, Other(10) | 97 | 1 | 1.0 | 264 | 18 | 6.8 | 66 | 11 | 16.7 | | | | | | |
| Environmental Sciences(3) | | | | 420 | 51 | 12.1 | 284 | 54 | 19.0 | 42 | 6 | 14.3 | 35 | 8 | 22.9 |
| Hydrology & Water Res(7) | 65 | 1 | 1.5 | 215 | 1 | 0.5 | 127 | 11 | 8.7 | 17 | 1 | 5.9 | 16 | 1 | 6.3 |
| Oceanography | 268 | 5 | 1.9 | 843 | 55 | 6.5 | 480 | 91 | 19.0 | 68 | 21 | 30.9 | 78 | 8 | 10.3 |
| Marine Sciences(2) | | | | | | | 67 | 15 | 22.4 | 24 | 2 | 8.3 | 22 | 3 | 13.6 |
| Marine Sciences, Other(8) | | | | 68 | 8 | 11.8 | 96 | 16 | 16.7 | | | | | | |
| Physical Sciences, Other(2) | | | | | | | 39 | 5 | 12.8 | 20 | 3 | 15.0 | 30 | 5 | 16.7 |

(1) In 1962 'Geological engineering' became 'Applied geology, geological engineering, economic geology and petroleum engineering' and, in 1969 was split into 'Applied geology, geological engineering and economic geology' and 'Fuel technology and petroleum engineering.' 'Fuel technology and petroleum engineering' was discontinued in 1983 and 'Applied geology, geological engineering and engineering and economic geology' was replaced by 'Applied geology.' (2) Introduced in 1983. (3) In 1983 'Environmental sciences' replaced 'Environmental sciences, general' and 'Environmental sciences, other.' (4) 'Minerology, petrology, and geochemistry' was split into 'Geochemistry' and 'Mineralogy, petrology' in 1969. (5) 'Structural geology' was deleted in 1983 and 'Geology' was introduced. (6) 'Geophysics' became 'Geophysics, solid earth in 1976 and then 'Geophysics and seismology in 1983. (7) Originally listed as 'Hydrology.' 'Water resources' added to title in 1977. (8) Introduced in 1977. Deleted in 1983. (9) Deleted in 1976 - restored in 1983. (10) 'Earth science, general' and 'Earth sciences, other' deleted in 1983 and 'Geological sciences, general' and 'Geological sciences, other' were introduced.

FIELD: Geosciences

SOURCE: Student Enrollment in Geoscience Departments 1975-76 through 1981-82 and 1985-86 and 1986-87, unpublished, American Geological Institute

## TABLE 6-24

DEGREES AWARDED BY U.S. GEOSCIENCE DEPARTMENTS BY LEVEL, FIELD AND SEX, SELECTED YEARS, 1975-76 - 1986-87

| DEPARTMENT and sex | Bachelors | | | | | Masters | | | | | Doctorates | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | '75-76 | '79-80 | '81-82 | '85-86 | '86-87* | '75-76 | '79-80 | '81-82 | '85-86 | '86-87* | '75-76 | '79-80 | '81-82 | '85-86 | '86-87* |
| ALL FIELDS | | | | | | | | | | | | | | | |
| Total | 4774 | 6580 | 7253 | 5931 | 4420 | 1577 | 1826 | 1868 | 2109 | 1993 | 486 | 486 | 465 | 573 | 615 |
| Women | 978 | 1644 | 1783 | 1425 | 1092 | 207 | 369 | 426 | 498 | 570 | 38 | 49 | 78 | 124 | 111 |
| % Women | 20.5 | 25.0 | 24.6 | 24.0 | 24.7 | 13.1 | 20.2 | 22.8 | 23.6 | 28.6 | 7.8 | 10.1 | 16.8 | 21.6 | 18.0 |
| Geology | | | | | | | | | | | | | | | |
| Total | 3583 | 5092 | 5544 | 4283 | 3008 | 959 | 1218 | 1149 | 1305 | 1229 | 254 | 258 | 203 | 240 | 313 |
| Women | 748 | 1272 | 1390 | 1039 | 739 | 130 | 248 | 261 | 315 | 350 | 20 | 31 | 43 | 64 | 67 |
| % Women | 20.9 | 25.0 | 25.1 | 24.3 | 24.6 | 13.6 | 20.4 | 22.7 | 24.1 | 28.5 | 7.9 | 12.0 | 21.2 | 26.7 | 21.4 |
| Geophysics | | | | | | | | | | | | | | | |
| Total | 80 | 174 | 217 | 266 | 225 | 92 | 120 | 171 | 140 | 201 | 41 | 58 | 49 | 65 | 97 |
| Women | 14 | 31 | 41 | 59 | 47 | 5 | 15 | 34 | 25 | 42 | 1 | 6 | 4 | 11 | 11 |
| % Women | 17.5 | 17.8 | 18.9 | 22.2 | 20.9 | 5.4 | 12.5 | 19.9 | 17.9 | 20.9 | 2.4 | 10.3 | 8.2 | 16.9 | 11.3 |
| Oceanography | | | | | | | | | | | | | | | |
| Marine Total | 238 | 173 | 173 | 169 | 178 | 177 | 208 | 218 | 278 | 171 | 65 | 86 | 103 | 159 | 116 |
| Science Women | 12 | 38 | 38 | 36 | 34 | 17 | 49 | 52 | 66 | 78 | 6 | 6 | 18 | 35 | 14 |
| % Women | 5.0 | 22.0 | 22.0 | 21.3 | 19.1 | 9.6 | 23.6 | 23.9 | 23.7 | 45.6 | 9.2 | 7.0 | 17.5 | 22.0 | 12.1 |
| Geological | | | | | | | | | | | | | | | |
| Eng. Total | 123 | 244 | 487 | 489 | 255 | 66 | 45 | 90 | 100 | 70 | 11 | 11 | 16 | 17 | 15 |
| Women | 9 | 47 | 62 | 82 | 44 | 4 | 7 | 14 | 11 | 11 | 2 | 0 | 0 | 1 | 2 |
| % Women | 7.3 | 19.3 | 12.7 | 16.8 | 17.3 | 6.1 | 15.6 | 15.6 | 11.0 | 15.7 | 18.2 | 0.0 | 0.0 | 5.9 | 13.3 |
| Geophysical | | | | | | | | | | | | | | | |
| Eng. Total | 24 | 49 | 62 | 11 | 44 | 9 | 22 | 13 | 6 | 19 | 2 | 7 | 2 | 0 | 3 |
| Women | 1 | 8 | 8 | 1 | 11 | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 2 |
| % Women | 4.2 | 16.3 | 12.9 | 9.1 | 25.0 | 0.0 | 9.1 | 7.7 | 0.0 | 15.8 | 0.0 | 0.0 | 0.0 | | 66.7 |
| Geochemistry | | | | | | | | | | | | | | | |
| Total | 5 | 14 | 17 | 24 | 13 | 43 | 44 | 28 | 39 | 33 | 27 | 26 | 30 | 24 | 13 |
| Women | 2 | 3 | 6 | 4 | 0 | 8 | 9 | 10 | 12 | 9 | 1 | 1 | 3 | 4 | 3 |
| % Women | 40.0 | 21.4 | 35.3 | 16.7 | 0.0 | 18.6 | 20.5 | 35.7 | 30.8 | 27.3 | 3.7 | 3.8 | 10.0 | 16.7 | 23.1 |
| Hydrology | | | | | | | | | | | | | | | |
| Total | 45 | 22 | 23 | 30 | 56 | 68 | 44 | 56 | 84 | 100 | 33 | 11 | 8 | 16 | 6 |
| Women | 9 | 9 | 8 | 6 | 18 | 10 | 2 | 13 | 16 | 25 | 1 | 0 | 1 | 1 | 1 |
| % Women | 20.0 | 40.9 | 34.8 | 20.0 | 32.1 | 14.7 | 4.5 | 23.2 | 19.0 | 25.0 | 3.0 | 0.0 | 12.5 | 6.3 | 16.7 |
| Mineralogy | | | | | | | | | | | | | | | |
| Total | 2 | 5 | 59 | 0 | 6 | 21 | 14 | 21 | 5 | 10 | 9 | 6 | 9 | 3 | 2 |
| Women | 2 | 3 | 10 | 0 | 1 | 3 | 4 | 1 | 4 | 3 | 0 | 0 | 1 | 0 | 0 |
| % Women | 100.0 | 60.0 | 16.9 | | 16.7 | 14.3 | 28.6 | 4.8 | 80.0 | 30.0 | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 |
| Paleontology | | | | | | | | | | | | | | | |
| Total | 11 | 16 | 4 | 12 | 11 | 37 | 22 | 26 | 29 | 25 | 26 | 8 | 9 | 12 | 10 |
| Women | 4 | 6 | 1 | 7 | 3 | 9 | 6 | 8 | 10 | 8 | 5 | 1 | 2 | 2 | 3 |
| % Women | 36.4 | 37.5 | 25.0 | 58.3 | 27.3 | 24.3 | 27.3 | 30.8 | 34.5 | 32.0 | 19.2 | 12.5 | 22.2 | 16.7 | 30.0 |
| Soil Science | | | | | | | | | | | | | | | |
| Total | 8 | 46 | 8 | 8 | 21 | 1 | 3 | 0 | 0 | 19 | 1 | 0 | 0 | 0 | 5 |
| Women | 0 | 16 | 2 | 2 | 8 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 1 |
| % Women | 0.0 | 34.8 | 25.0 | 25.0 | 38.1 | 0.0 | 0.0 | | | 31.6 | 0.0 | | | | 20.0 |
| Environmental | | | | | | | | | | | | | | | |
| Sci. Total | 196 | 335 | 240 | 244 | 162 | 42 | 33 | 34 | 38 | 65 | 7 | 9 | 17 | 3 | 9 |
| Women | 66 | 88 | 86 | 82 | 41 | 4 | 11 | 17 | 13 | 21 | 0 | 0 | 3 | 0 | 2 |
| % Women | 33.7 | 26.3 | 35.8 | 33.6 | 25.3 | 9.5 | 33.3 | 50.0 | 34.2 | 32.3 | 0.0 | 0.0 | 17.6 | 0.0 | 22.2 |
| Earth Science | | | | | | | | | | | | | | | |
| Teaching Total | 186 | 91 | 56 | 103 | 109 | 31 | 14 | 18 | 11 | 19 | 1 | 0 | 0 | 0 | 1 |
| Women | 53 | 38 | 22 | 34 | 54 | 9 | 5 | 9 | 4 | 6 | 0 | 0 | 0 | 0 | 1 |
| % Women | 28.5 | 41.8 | 39.3 | 33.0 | 49.5 | 29.0 | 35.7 | 50.0 | 36.4 | 31.6 | 0.0 | | | | 100.0 |
| Earth Science, | | | | | | | | | | | | | | | |
| General Total | 273 | 319 | 363 | 292 | 332 | 31 | 39 | 44 | 74 | 32 | 9 | 6 | 19 | 34 | 25 |
| Women | 58 | 85 | 109 | 73 | 92 | 8 | 11 | 6 | 22 | 8 | 2 | 4 | 3 | 6 | 4 |
| % Women | 21.2 | 26.6 | 30.0 | 25.0 | 27.7 | 25.8 | 28.2 | 13.6 | 29.7 | 25.0 | 22.2 | 66.7 | 15.8 | 17.6 | 16.0 |

* 1986-87 data are from 429 of 538 degree granting departments. AGI indicates that totals for all departments could be obtained by multiplying these data by 1.25.

FIELD: Geosciences

SOURCE: Student Enrollment in Geoscience Departments 1975-76 through 1981-82 and 1985-86 and 1986-87, unpublished, American Geological Institute

## TABLE 6-25

ENROLLMENTS IN GEOSCIENCE DEPARTMENTS BY LEVEL, FIELD AND SEX, SELECTED YEARS, 1975-76 - 1986-87

| DEPARTMENT and year | Freshmen and Soph | | | Juniors | | | Seniors | | | Undergraduates | | | Masters | | | Doctorates | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| ALL FIELDS | | | | | | | | | | | | | | | | | | |
| 1980-81 | 11752 | 2811 | 23.9 | 9454 | 2336 | 24.7 | 10738 | 2652 | 24.7 | 31944 | 7799 | 24.4 | 7370 | 1794 | 24.3 | 2810 | 530 | 18.9 |
| 1981-82 | 13247 | 3121 | 23.6 | 10059 | 2504 | 24.9 | 11046 | 2727 | 24.7 | 34352 | 8352 | 24.3 | 7349 | 1825 | 24.8 | 2759 | 558 | 20.2 |
| 1982-83 | 13146 | 2994 | 22.8 | 10845 | 2662 | 24.5 | 12901 | 3176 | 24.6 | 36892 | 8832 | 23.9 | 7511 | 1869 | 24.9 | 2897 | 621 | 21.4 |
| 1985-86* | 7966 | 2124 | 26.7 | 6615 | 1705 | 25.8 | 10522 | 2629 | 25.0 | 25102 | 6459 | 25.7 | 9017 | 2323 | 25.8 | 4296 | 1012 | 23.6 |
| 1986-87* | 5734 | 1666 | 29.1 | 5020 | 1399 | 27.9 | 8220 | 2156 | 26.2 | 18974 | 5221 | 27.5 | 7854 | 2105 | 26.8 | 4209 | 1019 | 24.2 |
| Geology | | | | | | | | | | | | | | | | | | |
| 1980-81 | 9113 | 2114 | 23.2 | 7511 | 1817 | 24.2 | 8423 | 2059 | 24.4 | 25047 | 5990 | 23.9 | 4883 | 1164 | 23.8 | 1257 | 245 | 19.5 |
| 1981-82 | 10390 | 2307 | 22.2 | 8009 | 2013 | 25.1 | 8756 | 2151 | 24.6 | 27155 | 6471 | 23.8 | 5060 | 1249 | 24.7 | 1116 | 223 | 20.0 |
| 1982-83 | 9943 | 2263 | 22.8 | 8574 | 2122 | 24.7 | 10210 | 2557 | 25.0 | 28727 | 6942 | 24.2 | 5007 | 1270 | 25.4 | 1150 | 250 | 21.7 |
| 1985-86 | 4662 | 1249 | 26.8 | 4513 | 1141 | 25.3 | 7441 | 1863 | 25.0 | 16617 | 4254 | 25.6 | 6104 | 1590 | 26.0 | 2004 | 499 | 24.9 |
| 1986-87 | 3484 | 968 | 27.8 | 3209 | 849 | 26.5 | 5370 | 1376 | 25.6 | 12063 | 3193 | 26.5 | 4818 | 1284 | 26.6 | 1980 | 501 | 25.3 |
| Geophysics | | | | | | | | | | | | | | | | | | |
| 1980-81 | 290 | 64 | 22.1 | 279 | 63 | 22.6 | 304 | 53 | 17.4 | 873 | 180 | 20.6 | 534 | 88 | 16.5 | 359 | 52 | 14.5 |
| 1981-82 | 303 | 59 | 19.5 | 221 | 52 | 23.5 | 353 | 78 | 22.1 | 877 | 189 | 21.6 | 499 | 84 | 16.8 | 393 | 63 | 16.0 |
| 1982-83 | 449 | 99 | 22.0 | 362 | 74 | 20.4 | 383 | 84 | 21.9 | 1194 | 257 | 21.5 | 508 | 90 | 17.7 | 422 | 66 | 15.6 |
| 1985-86 | 188 | 49 | 26.0 | 173 | 35 | 20.4 | 437 | 113 | 26.0 | 798 | 198 | 24.8 | 584 | 122 | 20.9 | 578 | 104 | 17.9 |
| 1986-87 | 163 | 45 | 27.7 | 193 | 61 | 31.8 | 480 | 96 | 20.1 | 835 | 203 | 24.3 | 690 | 141 | 20.5 | 678 | 121 | 17.9 |
| Oceanography | | | | | | | | | | | | | | | | | | |
| Marine Science 1980-81 | 453 | 87 | 19.2 | 188 | 40 | 21.3 | 240 | 56 | 23.3 | 881 | 183 | 20.8 | 781 | 227 | 29.1 | 681 | 142 | 20.9 |
| 1981-82 | 487 | 112 | 23.0 | 198 | 30 | 15.2 | 202 | 36 | 17.8 | 887 | 178 | 20.1 | 740 | 218 | 29.5 | 699 | 160 | 22.9 |
| 1982-83 | 507 | 110 | 21.7 | 227 | 49 | 21.6 | 226 | 43 | 19.0 | 960 | 202 | 21.0 | 781 | 216 | 27.7 | 677 | 169 | 25.0 |
| 1985-86 | 511 | 105 | 20.5 | 216 | 49 | 22.6 | 249 | 51 | 20.6 | 976 | 205 | 21.0 | 789 | 280 | 35.5 | 917 | 243 | 26.5 |
| 1986-87 | 755 | 224 | 29.6 | 394 | 126 | 32.1 | 389 | 73 | 18.6 | 1538 | 423 | 27.5 | 710 | 234 | 32.9 | 718 | 200 | 27.9 |
| Geological Eng. | | | | | | | | | | | | | | | | | | |
| 1980-81 | 621 | 144 | 23.2 | 336 | 67 | 19.9 | 426 | 72 | 16.9 | 1383 | 283 | 20.5 | 128 | 22 | 17.2 | 36 | 0 | 0.0 |
| 1981-82 | 738 | 159 | 21.5 | 405 | 76 | 18.8 | 483 | 98 | 20.3 | 1626 | 333 | 20.5 | 137 | 24 | 17.5 | 31 | 1 | 3.2 |
| 1982-83 | 1040 | 203 | 19.5 | 656 | 104 | 15.9 | 856 | 120 | 14.0 | 2552 | 427 | 16.7 | 292 | 46 | 15.8 | 95 | 7 | 7.4 |
| 1985-86 | 400 | 83 | 20.7 | 365 | 63 | 17.4 | 773 | 139 | 18.0 | 1538 | 285 | 18.6 | 279 | 27 | 9.6 | 67 | 1 | 1.9 |
| 1986-87 | 191 | 51 | 26.8 | 144 | 36 | 25.2 | 434 | 70 | 16.1 | 769 | 158 | 20.5 | 245 | 39 | 15.8 | 106 | 8 | 7.1 |
| Geophysical Eng. | | | | | | | | | | | | | | | | | | |
| 1980-81 | 96 | 21 | 21.9 | 60 | 14 | 23.3 | 79 | 14 | 17.7 | 235 | 49 | 20.9 | 92 | 13 | 14.1 | 8 | 0 | 0.0 |
| 1981-82 | 110 | 23 | 20.9 | 80 | 20 | 25.0 | 94 | 14 | 14.9 | 284 | 57 | 20.1 | 84 | 11 | 13.1 | 18 | 0 | 0.0 |
| 1982-83 | 151 | 35 | 23.2 | 73 | 10 | 13.7 | 104 | 23 | 22.1 | 328 | 68 | 20.7 | 78 | 13 | 16.7 | 17 | 1 | 5.9 |
| 1985-86 | 88 | 20 | 22.2 | 51 | 6 | 11.9 | 177 | 39 | 22.1 | 316 | 65 | 20.5 | 89 | 21 | 23.3 | 21 | 4 | 17.6 |
| 1986-87 | 64 | 16 | 25.5 | 48 | 5 | 10.5 | 76 | 23 | 29.5 | 188 | 44 | 23.3 | 49 | 11 | 23.1 | 31 | 9 | 28.0 |
| Geochemistry | | | | | | | | | | | | | | | | | | |
| 1980-81 | 17 | 1 | 5.9 | 17 | 0 | 0.0 | 25 | 9 | 36.0 | 59 | 10 | 16.9 | 226 | 67 | 29.6 | 180 | 33 | 18.3 |
| 1981-82 | 25 | 5 | 20.0 | 27 | 3 | 11.1 | 22 | 4 | 18.2 | 74 | 12 | 16.2 | 182 | 50 | 27.5 | 195 | 45 | 23.1 |
| 1982-83 | 7 | 0 | 0.0 | 14 | 3 | 21.4 | 18 | 3 | 16.7 | 39 | 6 | 15.4 | 124 | 42 | 33.9 | 169 | 42 | 24.9 |
| 1985-86 | 39 | 10 | 25.0 | 30 | 15 | 46.0 | 37 | 10 | 26.7 | 106 | 34 | 32.2 | 213 | 65 | 30.3 | 212 | 66 | 31.0 |
| 1986-87 | 3 | 1 | 50.0 | 6 | 1 | 20.0 | 23 | 3 | 11.1 | 31 | 5 | 16.0 | 138 | 44 | 31.8 | 174 | 54 | 30.9 |

FIELD: Geosciences

SOURCE: Student Enrollment in Geoscience Departments 1975-76 through 1981-82 and 1985-86 and 1986-87, unpublished, American Geological Institute

## TABLE 6-25 (continued)

ENROLLMENTS IN GEOSCIENCE DEPARTMENTS BY LEVEL, FIELD AND SEX, SELECTED YEARS, 1975-76 - 1986-87

| DEPARTMENT and year | Freshmen and Soph | | | Juniors | | | Seniors | | | Undergraduates | | | Masters | | | Doctorates | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| Hydrology | | | | | | | | | | | | | | | | | | |
| 1980-81 | 20 | 3 | 15.0 | 31 | 5 | 16.1 | 42 | 8 | 19.0 | 93 | 16 | 17.2 | 195 | 42 | 21.5 | 38 | 6 | 15.8 |
| 1981-82 | 24 | 6 | 25.0 | 29 | 6 | 20.7 | 38 | 7 | 18.4 | 91 | 19 | 20.9 | 205 | 54 | 26.3 | 49 | 7 | 14.3 |
| 1982-83 | 24 | 5 | 20.8 | 44 | 14 | 31.8 | 42 | 6 | 14.3 | 110 | 25 | 22.7 | 194 | 41 | 21.1 | 59 | 14 | 23.7 |
| 1985-86 | 29 | 6 | 20.8 | 43 | 7 | 17.1 | 62 | 17 | 27.5 | 134 | 30 | 22.7 | 418 | 100 | 23.9 | 90 | 15 | 16.2 |
| 1986-87 | 86 | 25 | 29.0 | 71 | 21 | 29.8 | 131 | 36 | 27.6 | 289 | 83 | 28.6 | 474 | 111 | 23.5 | 91 | 18 | 19.2 |
| Mineralogy | | | | | | | | | | | | | | | | | | |
| 1980-81 | 4 | 0 | 0.0 | 4 | 1 | 25.0 | 4 | 0 | 0.0 | 12 | 1 | 8.3 | 55 | 17 | 30.9 | 36 | 6 | 16.7 |
| 1981-82 | 16 | 3 | 18.8 | 99 | 18 | 18.2 | 3 | 1 | 33.3 | 118 | 22 | 18.6 | 49 | 12 | 24.5 | 49 | 7 | 14.3 |
| 1982-83 | 66 | 8 | 12.1 | 64 | 6 | 9.4 | 93 | 15 | 16.1 | 223 | 29 | 13.0 | 100 | 21 | 21.0 | 68 | 16 | 23.5 |
| 1985-86 | 39 | 4 | 9.4 | 16 | 5 | 30.8 | 11 | 5 | 44.4 | 66 | 13 | 20.4 | 20 | 9 | 43.8 | 33 | 10 | 29.6 |
| 1986-87 | 10 | 1 | 12.5 | 25 | 3 | 10.0 | 20 | 6 | 31.3 | 55 | 10 | 18.2 | 40 | 11 | 28.1 | 38 | 6 | 16.7 |
| Paleontology | | | | | | | | | | | | | | | | | | |
| 1980-81 | 8 | 1 | 12.5 | 13 | 5 | 38.5 | 8 | 1 | 12.5 | 29 | 7 | 24.1 | 120 | 43 | 35.8 | 96 | 22 | 22.9 |
| 1981-82 | 25 | 7 | 28.0 | 89 | 19 | 21.3 | 21 | 6 | 28.6 | 135 | 32 | 23.7 | 94 | 31 | 33.0 | 105 | 31 | 29.5 |
| 1982-83 | 9 | 2 | 22.2 | 22 | 5 | 22.7 | 13 | 4 | 30.8 | 44 | 11 | 25.0 | 87 | 26 | 29.9 | 83 | 24 | 28.9 |
| 1985-86 | 12 | 5 | 40.0 | 16 | 4 | 23.1 | 22 | 9 | 38.9 | 50 | 17 | 34.1 | 106 | 32 | 29.9 | 109 | 26 | 23.6 |
| 1986-87 | 1 | 0 | 0.0 | 28 | 4 | 13.6 | 24 | 9 | 36.8 | 53 | 13 | 23.8 | 105 | 38 | 35.7 | 143 | 36 | 25.4 |
| Soil Science | | | | | | | | | | | | | | | | | | |
| 1980-81 | 8 | 1 | 12.5 | 41 | 20 | 48.8 | 53 | 23 | 43.4 | 102 | 44 | 43.1 | 8 | 3 | 37.5 | 2 | 1 | 50.0 |
| 1981-82 | 25 | 7 | 28.0 | 10 | 2 | 20.0 | 15 | 3 | 20.0 | 50 | 12 | 24.0 | 0 | 0 | | 1 | 1 | 100.0 |
| 1982-83 | 9 | 2 | 22.2 | 11 | 3 | 27.3 | 10 | 2 | 20.0 | 30 | 7 | 23.3 | 0 | 0 | | 1 | 0 | 0.0 |
| 1985-86 | 28 | 4 | 13.0 | 17 | 4 | 21.4 | 27 | 6 | 22.7 | 72 | 13 | 18.6 | | | | 0 | 0 | |
| 1986-87 | 53 | 16 | 31.0 | 50 | 18 | 35.0 | 46 | 18 | 37.8 | 149 | 51 | 34.5 | 66 | 26 | 39.6 | 18 | 5 | 28.6 |
| Environmental Sci. | | | | | | | | | | | | | | | | | | |
| 1980-81 | 425 | 180 | 42.4 | 373 | 124 | 33.2 | 451 | 118 | 26.2 | 1249 | 422 | 33.8 | 125 | 42 | 33.6 | 36 | 11 | 30.6 |
| 1981-82 | 380 | 218 | 57.4 | 350 | 91 | 26.0 | 368 | 97 | 26.4 | 1098 | 406 | 37.0 | 124 | 42 | 33.9 | 29 | 6 | 20.7 |
| 1982-83 | 205 | 70 | 34.1 | 237 | 91 | 38.4 | 262 | 104 | 39.7 | 704 | 265 | 37.6 | 134 | 60 | 44.8 | 56 | 14 | 25.0 |
| 1985-86 | 893 | 239 | 26.8 | 423 | 139 | 32.9 | 449 | 152 | 34.0 | 1765 | 530 | 30.1 | 128 | 49 | 38.1 | 46 | 16 | 34.2 |
| 1986-87 | 248 | 83 | 33.3 | 241 | 94 | 38.9 | 353 | 138 | 39.0 | 841 | 314 | 37.3 | 258 | 78 | 30.1 | 83 | 19 | 22.7 |
| Earth Science Teaching | | | | | | | | | | | | | | | | | | |
| 1980-81 | 84 | 29 | 34.5 | 140 | 63 | 45.0 | 148 | 63 | 42.6 | 372 | 155 | 41.7 | 77 | 28 | 36.4 | 2 | 0 | 0.0 |
| 1981-82 | 85 | 32 | 37.6 | 109 | 47 | 43.1 | 111 | 53 | 47.7 | 305 | 132 | 43.3 | 62 | 20 | 32.3 | 3 | 2 | 66.7 |
| 1982-83 | 83 | 39 | 47.0 | 102 | 49 | 48.0 | 142 | 77 | 54.2 | 327 | 165 | 50.5 | 54 | 21 | 38.9 | 2 | 1 | 50.0 |
| 1985-86 | 221 | 83 | 37.6 | 188 | 63 | 33.8 | 187 | 60 | 32.0 | 595 | 206 | 34.6 | 77 | 26 | 33.3 | 5 | 0 | 0.0 |
| 1986-87 | 210 | 85 | 40.5 | 234 | 89 | 38.0 | 326 | 123 | 37.5 | 770 | 296 | 38.5 | 114 | 51 | 45.1 | 8 | 4 | 50.0 |
| Earth Science, General | | | | | | | | | | | | | | | | | | |
| 1980-81 | 613 | 166 | 27.1 | 461 | 117 | 25.4 | 535 | 176 | 32.9 | 1609 | 459 | 28.5 | 146 | 38 | 26.0 | 79 | 12 | 15.2 |
| 1981-82 | 639 | 183 | 28.6 | 433 | 127 | 29.3 | 580 | 179 | 30.9 | 1652 | 489 | 29.6 | 113 | 30 | 26.5 | 71 | 12 | 16.9 |
| 1982-83 | 653 | 158 | 24.2 | 459 | 132 | 28.8 | 542 | 138 | 25.5 | 1654 | 428 | 25.9 | 152 | 23 | 15.1 | 98 | 17 | 17.3 |
| 1985-86 | 856 | 270 | 31.5 | 563 | 173 | 30.7 | 651 | 165 | 25.3 | 2071 | 607 | 29.3 | 210 | 43 | 20.3 | 215 | 43 | 19.9 |
| 1986-87 | 468 | 151 | 32.4 | 379 | 93 | 24.4 | 549 | 188 | 34.2 | 1395 | 431 | 30.9 | 149 | 38 | 25.2 | 144 | 39 | 27.0 |

* Because not all departments returned questionnaires, 1985-86 data are 1.2 times and 1986-87 data are 1.25 times the unadjusted data provided by the AGI in order to present totals more likely representative of all degree granting departments.

FIELD: Geological Sciences

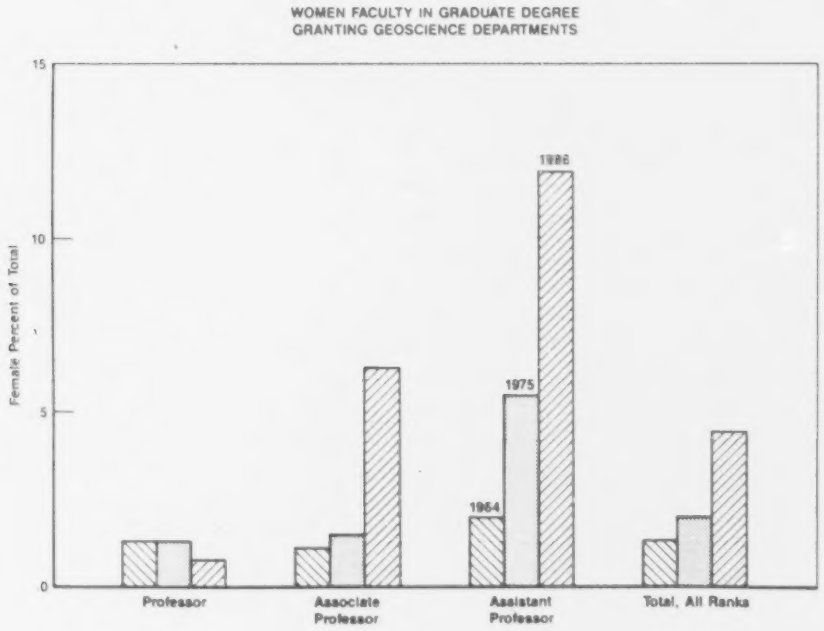
SOURCE: "Women in Academia: Students and Professors Revisited," **GEOLOGY**, V. 15, August 1987.

TABLE 6-26

FACULTY IN U.S. DEPARTMENTS OF GEOLOGICAL SCIENCES, 1986-87

| Graduate Depts. (M.S./M.A. & PhD) | Professor | Associate Professor | Assistant Professor | Lecturer/ Instructor | All Ranks Total |
|---|---|---|---|---|---|
| Men | 1,958 | 855 | 620 | 97 | 3,530 |
| Women | 15 | 57 | 83 | 14 | 169 |
| Total | 1,973 | 912 | 703 | 111 | 3,699 |
| Percent Women | 0.76 | 6.3 | 11.8 | 12.6 | 4.6 |
| **Undergraduate Dept. (2 Year and BA/BS)** | | | | | |
| Men | 754 | 296 | 307 | 202 | 1,559 |
| Women | 25 | 26 | 47 | 47 | 145 |
| Total | 779 | 322 | 354 | 249 | 1,704 |
| Percent Women | 3.2 | 8.1 | 13.3 | 18.9 | 8.5 |

Note: Male-Female distinction made on basis of first name



SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 6-27

PHD AWARDS IN MATHEMATICS AND COMPUTER/INFORMATION SCIENCES BY SUBFIELD AND SEX, 1960-86

| | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| Subfields | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL MATH & COMP SCIENCE | 6407 | 363 | 5.7 | 11240 | 1130 | 10.1 | 5842 | 810 | 13.9 | 1000 | 139 | 13.9 | 1129 | 170 | 15.1 |
| MATHEMATICS TOTAL | 6407 | 363 | 5.7 | 10877 | 1086 | 10.0 | 4280 | 637 | 14.9 | 689 | 106 | 15.4 | 730 | 121 | 16.6 |
| Applied Mathematics | 831 | 26 | 3.1 | 1181 | 67 | 5.7 | 678 | 99 | 14.6 | 117 | 19 | 16.2 | 136 | 20 | 14.7 |
| Algebra | 949 | 88 | 9.3 | 1330 | 209 | 15.7 | 369 | 68 | 18.4 | 55 | 6 | 10.9 | 46 | 18 | 39.1 |
| Analysis/Funct Analysis(1) | 1616 | 84 | 5.2 | 1901 | 158 | 8.3 | 524 | 62 | 11.8 | 83 | 10 | 12.0 | 81 | 11 | 13.6 |
| Geometry | 215 | 14 | 6.5 | 302 | 35 | 11.6 | 202 | 19 | 9.4 | 35 | 2 | 5.7 | 38 | 1 | 2.6 |
| Logic | 183 | 12 | 6.6 | 293 | 31 | 10.6 | 135 | 10 | 7.4 | 30 | 4 | 13.3 | 23 | 3 | 13.0 |
| Number Theory | 181 | 23 | 12.7 | 270 | 32 | 11.9 | 144 | 18 | 12.5 | 18 | 2 | 11.1 | 20 | 1 | 5.0 |
| Probability/Math tat (3) | 894 | 44 | 6.9 | 1669 | 179 | 12.2 | 961 | 177 | 18.4 | 150 | 32 | 21.3 | 141 | 27 | 19.1 |
| Topology | 790 | 30 | 3.8 | 975 | 85 | 8.7 | 278 | 46 | 16.5 | 35 | 4 | 11.4 | 34 | 6 | 17.6 |
| Computing Theory | 255 | 5 | 2.0 | 1345 | 99 | 7.4 | 80 | 6 | 7.5 | 15 | 1 | 6.7 | 10 | 0 | 0.0 |
| Operations Research(2) | | | | 246 | 19 | 7.7 | 182 | 26 | 14.3 | 22 | 6 | 27.3 | 29 | 4 | 13.8 |
| Mathematics, General | 276 | 19 | 6.9 | 999 | 116 | 11.6 | 493 | 58 | 11.8 | 85 | 12 | 14.1 | 125 | 20 | 16.0 |
| Mathematics, Other | 217 | 18 | 8.3 | 566 | 56 | 9.9 | 234 | 48 | 20.5 | 44 | 8 | 18.2 | 47 | 10 | 21.3 |
| COMPUTER/INFORMATION SCI | | | | 363 | 44 | 12.1 | 1562 | 173 | 11.1 | 311 | 33 | 10.6 | 399 | 49 | 12.3 |
| Computer Science(4) | | | | 363 | 44 | 12.1 | 1440 | 144 | 10.0 | 250 | 20 | 8.0 | 355 | 40 | 11.3 |
| Information Sci/Systems(5) | | | | | | | 122 | 29 | 23.8 | 61 | 13 | 21.3 | 44 | 9 | 20.5 |

(1) 'Anaylisis' before 1968. (2) Introduced in 1973. (3) 'Math statistics' removed from the name of this subfield in 1969, but restored in 1972. (4) Introduced in 1977. (5) Introduced in 1983.

FIELD: Mathematical Sciences

SOURCE: "First Report on the 30th Annual Survey 1986", The American Mathematical Society Notices, Nov. 1986

## TABLE 6-28

SEX, MINORITY GROUP, AND CITIZENSHIP OF NEW DOCTORATES IN THE MATHEMATICAL SCIENCES FROM U.S. INSTITUTIONS, July 1, 1985 - June 30, 1986

| U.S. DEGREES | MEN | | | | | WOMEN | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | CITIZENSHIP | | | | | CITIZENSHIP | | | | | |
| RACIAL/ETHNIC GROUP | U.S. | Canada | Other | Not Known | Total Men | U.S. | Canada | Other | Not Known | Total Women | |
| Asian, Pacific Islander | 13 | | 129 | 1 | 143 | 3 | | 31 | | 34 | 177 |
| Black | 2 | | 6 | | 8 | 3 | | | | 3 | 11 |
| Am. Indian, Eskimo, Aleut | | | | | | | | 1 | | 1 | 1 |
| Mexican American, Chicano, Puerto Rican | 4 | | 3 | 1 | 8 | 2 | | | | 2 | 10 |
| None of those above | 271 | 5 | 163 | | 439 | 70 | | 22 | | 92 | 531 |
| Unknown | 14 | | 8 | | 22 | 4 | | | | 4 | 26 |
| Total Number | 304 | 5 | 309 | 2 | 620 | 82 | | 54 | | 136 | 756 |

FIELD: Mathematical Sciences

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council, 1981-1987

## TABLE 6-29

NUMBER OF Ph.D. RECIPIENTS IN THE MATHEMATICAL SCIENCES BY TYPE OF CITIZENSHIP, 1960-1986

| YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship Unknown |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 291 | 233 | 55 | 11 | 44 | 3 |
| 1961 | 332 | 272 | 51 | 7 | 44 | 9 |
| 1962 | 388 | 312 | 72 | 7 | 65 | 4 |
| 1963 | 483 | 401 | 72 | 11 | 61 | 10 |
| 1964 | 588 | 489 | 89 | 9 | 80 | 10 |
| 1965 | 685 | 578 | 92 | 16 | 76 | 15 |
| 1966 | 769 | 634 | 119 | 22 | 97 | 16 |
| 1967 | 830 | 692 | 119 | 27 | 92 | 19 |
| 1968 | 970 | 798 | 154 | 42 | 112 | 18 |
| 1969 | 1,065 | 887 | 183 | 49 | 114 | 15 |
| 1970 | 1,224 | 1,018 | 191 | 57 | 134 | 15 |
| 1971 | 1,238 | 1,012 | 214 | 62 | 152 | 12 |
| 1972 | 1,281 | 1,030 | 234 | 65 | 169 | 17 |
| 1973 | 1,232 | 951 | 254 | 81 | 173 | 27 |
| 1974 | 1,208 | 873 | 295 | 71 | 224 | 40 |
| 1975 | 1,147 | 848 | 272 | 75 | 197 | 27 |
| 1976 | 1,003 | 748 | 238 | 55 | 183 | 17 |
| 1977 | 959 | 710 | 224 | 54 | 170 | 25 |
| 1978 | 959 | 704 | 233 | 52 | 181 | 22 |
| 1979 | 977 | 712 | 244 | 63 | 181 | 21 |
| 1980 | 963 | 676 | 258 | 76 | 182 | 29 |
| 1981 | 960 | 648 | 289 | 63 | 226 | 23 |
| 1982 | 720 | 458 | 233 | 41 | 192 | 29 |
| 1983 | 701 | 411 | 255 | 46 | 209 | 35 |
| 1984 | 699 | 407 | 277 | 45 | 232 | 15 |
| 1985 | 689 | 376 | 281 | 42 | 239 | 32 |
| 1986 | 730 | 367 | 308 | 36 | 272 | 55 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 6-30

PhD DEGREES IN THE MATHEMATICAL AND COMPUTER SCIENCES BY SEX AND SUBFIELD (1950 - 1986)

| | | | | | Mathematical/Computer Sciences Fields | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Mathematics | | | | | Computer/Information Sciences | | | | |
| Year | Total Math/CS | Men | Women | %W | No. | %M/CS | Men | Wom | %W | No. | %M/CS | Men | Wom | %W |
| 1950 | 160 | 151 | 9 | 5.6 | 160 | 100 | 151 | 9 | 5.6 | | | | | |
| 1951 | 184 | 175 | 9 | 4.9 | 184 | 100 | 175 | 9 | 4.9 | | | | | |
| 1952 | 206 | 195 | 11 | 5.3 | 206 | 100 | 195 | 11 | 5.3 | | | | | |
| 1953 | 241 | 227 | 14 | 5.8 | 241 | 100 | 227 | 14 | 5.8 | | | | | |
| 1954 | 227 | 213 | 14 | 6.2 | 227 | 100 | 213 | 14 | 6.2 | | | | | |
| 1955 | 250 | 239 | 11 | 4.4 | 250 | 100 | 239 | 11 | 4.4 | | | | | |
| 1956 | 235 | 225 | 10 | 4.3 | 235 | 100 | 225 | 10 | 4.3 | | | | | |
| 1957 | 249 | 236 | 13 | 5.2 | 249 | 100 | 236 | 13 | 5.2 | | | | | |
| 1958 | 247 | 232 | 15 | 6.1 | 247 | 100 | 232 | 15 | 6.1 | | | | | |
| 1959 | 282 | 267 | 15 | 5.3 | 282 | 100 | 267 | 15 | 5.3 | | | | | |
| 50-59 | 2,281 | 2,160 | 121 | 5.3 | 2,281 | 1,000 | 2,160 | 121 | 5.3 | | | | | |
| 1960 | 303 | 285 | 18 | 5.9 | 303 | 100 | 285 | 18 | 5.9 | | | | | |
| 1961 | 344 | 327 | 17 | 4.9 | 344 | 100 | 327 | 17 | 4.9 | | | | | |
| 1962 | 396 | 372 | 24 | 6.1 | 396 | 100 | 372 | 24 | 6.1 | | | | | |
| 1963 | 490 | 454 | 36 | 7.3 | 490 | 100 | 454 | 36 | 7.3 | | | | | |
| 1964 | 596 | 567 | 29 | 4.9 | 596 | 100 | 567 | 29 | 4.9 | | | | | |
| 1965 | 688 | 628 | 60 | 8.7 | 682 | 99 | 623 | 59 | 8.7 | 6 | 1 | 5 | 1 | 16.7 |
| 1966 | 801 | 744 | 57 | 7.1 | 782 | 98 | 725 | 57 | 7.3 | 19 | 2 | 19 | 0 | 0.0 |
| 1967 | 870 | 810 | 60 | 6.9 | 832 | 96 | 773 | 59 | 7.1 | 38 | 4 | 37 | 1 | 2.6 |
| 1968 | 983 | 931 | 52 | 5.3 | 947 | 96 | 895 | 52 | 5.5 | 36 | 4 | 36 | 0 | 0.0 |
| 1969 | 1161 | 1091 | 70 | 6.0 | 1097 | 94 | 1029 | 68 | 6.2 | 64 | 6 | 62 | 2 | 3.1 |
| 60-69 | 6,632 | 6,209 | 423 | 6.4 | 6,469 | 98 | 6,050 | 419 | 6.5 | 163 | 2 | 159 | 4 | 2.5 |
| 1970 | 1343 | 1245 | 98 | 7.3 | 1236 | 92 | 1140 | 96 | 7.8 | 107 | 8 | 105 | 2 | 1.9 |
| 1971 | 1327 | 1231 | 96 | 7.2 | 1199 | 90 | 1106 | 93 | 7.8 | 128 | 10 | 125 | 3 | 2.3 |
| 1972 | 1295 | 1196 | 101 | 7.8 | 1128 | 87 | 1039 | 89 | 7.9 | 167 | 13 | 155 | 12 | 7.2 |
| 1973 | 1264 | 1147 | 117 | 9.3 | 1068 | 84 | 966 | 102 | 9.6 | 196 | 16 | 181 | 15 | 7.7 |
| 1974 | 1229 | 1120 | 109 | 8.9 | 1031 | 84 | 931 | 100 | 9.7 | 198 | 16 | 189 | 9 | 4.5 |
| 1975 | 1188 | 1064 | 124 | 10.4 | 975 | 82 | 865 | 110 | 11.3 | 213 | 18 | 199 | 14 | 6.6 |
| 1976 | 1100 | 983 | 117 | 10.6 | 856 | 78 | 762 | 94 | 11.0 | 244 | 22 | 221 | 23 | 9.4 |
| 1977 | 1039 | 911 | 128 | 12.3 | 823 | 79 | 714 | 109 | 13.2 | 216 | 21 | 197 | 19 | 8.8 |
| 1978 | 1001 | 862 | 139 | 13.9 | 805 | 80 | 681 | 124 | 15.4 | 196 | 20 | 181 | 15 | 7.7 |
| 1979 | 966 | 814 | 152 | 15.7 | 730 | 76 | 608 | 122 | 16.7 | 236 | 24 | 206 | 30 | 12.7 |
| 70-79 | 11,752 | 10,571 | 1,181 | 10.0 | 9,851 | 84 | 8,812 | 1,039 | 10.5 | 1,901 | 16 | 1,759 | 142 | 7.5 |
| 1980 | 964 | 837 | 127 | 13.2 | 724 | 75 | 624 | 100 | 13.8 | 240 | 25 | 213 | 27 | 11.3 |
| 1981 | 980 | 841 | 139 | 14.2 | 728 | 74 | 614 | 114 | 15.7 | 252 | 26 | 227 | 25 | 9.9 |
| 1982 | 932 | 817 | 115 | 12.3 | 681 | 73 | 587 | 94 | 13.8 | 251 | 27 | 230 | 21 | 8.4 |
| 1983 | 960 | 810 | 150 | 15.6 | 698 | 73 | 582 | 116 | 16.6 | 262 | 27 | 228 | 34 | 13.0 |
| 1984 | 966 | 794 | 152 | 16.1 | 695 | 73 | 569 | 126 | 18.1 | 251 | 27 | 225 | 26 | 10.4 |
| 1985 | 947 | 813 | 134 | 14.1 | 699 | 74 | 590 | 109 | 15.6 | 248 | 26 | 223 | 25 | 10.1 |
| 1986 | 1086 | 917 | 169 | 15.6 | 742 | 68 | 618 | 124 | 16.7 | 344 | 32 | 299 | 45 | 13.1 |
| 80-86 | 6,815 | 5,829 | 986 | 16.5 | 4,967 | 73 | 4,184 | 783 | 15.8 | 1,848 | 27 | 1,645 | 203 | 11.0 |
| TOTAL | 27,480 | 24,769 | 2,711 | 9.9 | 23,568 | 86 | 21,206 | 2,362 | 10.0 | 3,912 | 14 | 3,563 | 349 | 8.9 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 6-30 (continued)

MASTERS DEGREES IN THE MATHEMATICAL AND COMPUTER SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | | Mathematical/Computer Sciences Fields | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Mathematics | | | | | Computer & Info Sciences | | | | |
| Year | Total Math/CS | Men | Women | %W | No. | %M/CS | Men | Women | %W | No. | %M/C | Men | Women | %W |
| 1950 | 974 | 784 | 190 | 19.5 | 974 | 100 | 784 | 190 | 19.5 | | | | | |
| 1951 | 1109 | 929 | 180 | 16.2 | 1109 | 100 | 929 | 180 | 16.2 | | | | | |
| 1952 | 802 | 663 | 139 | 17.3 | 802 | 100 | 663 | 139 | 17.3 | | | | | |
| 1953 | 677 | 565 | 112 | 16.5 | 677 | 100 | 565 | 112 | 16.5 | | | | | |
| 1954 | 706 | 579 | 127 | 18.0 | 706 | 100 | 579 | 127 | 18.0 | | | | | |
| 1955 | 761 | 613 | 148 | 19.4 | 761 | 100 | 613 | 148 | 19.4 | | | | | |
| 1956 | 898 | 719 | 179 | 19.9 | 898 | 100 | 719 | 179 | 19.9 | | | | | |
| 1957 | 965 | 777 | 188 | 19.5 | 965 | 100 | 777 | 188 | 19.5 | | | | | |
| 1958 | 1234 | 994 | 240 | 19.4 | 1234 | 100 | 994 | 240 | 19.4 | | | | | |
| 1959 | 1499 | 1188 | 311 | 20.7 | 1499 | 100 | 1188 | 311 | 20.7 | | | | | |
| 50-59 | 9,625 | 7811 | 1,814 | 18.8 | 9,625 | 100 | 7,811 | 1,814 | 18.8 | | | | | |
| 1960 | 1765 | 1428 | 337 | 19.1 | 1765 | 100 | 1428 | 337 | 19.1 | | | | | |
| 1961 | 2238 | 1772 | 466 | 20.8 | 2238 | 100 | 1772 | 466 | 20.8 | | | | | |
| 1962 | 2680 | 2179 | 501 | 18.7 | 2680 | 100 | 2179 | 501 | 18.7 | | | | | |
| 1963 | 3323 | 2665 | 658 | 19.8 | 3323 | 100 | 2665 | 658 | 19.8 | | | | | |
| 1964 | 3603 | 2914 | 689 | 19.1 | 3603 | 100 | 2914 | 689 | 19.1 | | | | | |
| 1965 | 4294 | 3482 | 812 | 18.9 | 4148 | 97 | 3342 | 806 | 19.4 | 146 | 3 | 140 | 6 | 4.1 |
| 1966 | 5010 | 3992 | 1018 | 20.3 | 4772 | 95 | 3771 | 1001 | 21.0 | 238 | 5 | 221 | 17 | 7.1 |
| 1967 | 5733 | 4423 | 1310 | 22.9 | 5284 | 92 | 4000 | 1284 | 24.3 | 449 | 8 | 423 | 26 | 5.8 |
| 1968 | 6081 | 4720 | 1361 | 22.4 | 5533 | 91 | 4202 | 1331 | 24.1 | 548 | 9 | 518 | 30 | 5.5 |
| 1969 | 6735 | 5169 | 1566 | 23.3 | 5722 | 85 | 4230 | 1493 | 26.1 | 1012 | 15 | 939 | 73 | 7.2 |
| 60-69 | 41,462 | 32744 | 8,718 | 21.0 | 39,069 | 94 | 30,503 | 8,566 | 21.9 | 2,393 | 6 | 2,241 | 152 | 6.4 |
| 1970 | 7107 | 5298 | 1809 | 25.5 | 5648 | 79 | 3974 | 1674 | 29.6 | 1459 | 21 | 1324 | 135 | 9.3 |
| 1971 | 6789 | 5101 | 1688 | 24.9 | 5201 | 77 | 3677 | 1524 | 29.3 | 1588 | 23 | 1424 | 164 | 10.3 |
| 1972 | 7186 | 5409 | 1777 | 24.7 | 5209 | 72 | 3657 | 1552 | 29.8 | 1977 | 28 | 1752 | 225 | 11.4 |
| 1973 | 7146 | 5416 | 1730 | 24.2 | 5033 | 70 | 3528 | 1505 | 29.9 | 2113 | 30 | 1888 | 225 | 10.6 |
| 1974 | 7116 | 5323 | 1793 | 25.2 | 4840 | 68 | 3340 | 1500 | 31.0 | 2276 | 32 | 1983 | 293 | 12.9 |
| 1975 | 6637 | 4871 | 1766 | 26.6 | 4338 | 65 | 2910 | 1428 | 32.9 | 2299 | 35 | 1961 | 338 | 14.7 |
| 1976 | 6466 | 4776 | 1690 | 26.1 | 3863 | 60 | 2550 | 1313 | 34.0 | 2603 | 40 | 2226 | 377 | 14.5 |
| 1977 | 6496 | 4730 | 1766 | 27.2 | 3698 | 57 | 2398 | 1300 | 35.2 | 2798 | 43 | 2332 | 466 | 16.7 |
| 1978 | 6421 | 4704 | 1717 | 26.7 | 3383 | 53 | 2233 | 1150 | 34.0 | 3038 | 47 | 2471 | 567 | 18.7 |
| 1979 | 6101 | 4469 | 1632 | 26.7 | 3046 | 50 | 1989 | 1057 | 34.7 | 3055 | 50 | 2480 | 575 | 18.8 |
| 70-79 | 67,465 | 50097 | 17,368 | 25.7 | 44,259 | 66 | 30,256 | 14,003 | 31.6 | 23,206 | 34 | 19,841 | 3,365 | 14.5 |
| 1980 | 6515 | 4715 | 1800 | 27.6 | 2868 | 44 | 1832 | 1036 | 36.1 | 3647 | 56 | 2883 | 764 | 20.9 |
| 1981 | 6785 | 4939 | 1846 | 27.2 | 2567 | 38 | 1692 | 875 | 34.1 | 4218 | 62 | 3247 | 971 | 23.0 |
| 1982 | 7662 | 5446 | 2216 | 28.9 | 2727 | 36 | 1821 | 906 | 33.2 | 4935 | 64 | 3625 | 1310 | 26.5 |
| 1983 | 8158 | 5671 | 2487 | 30.5 | 2837 | 35 | 1858 | 979 | 34.5 | 5321 | 65 | 3813 | 1508 | 28.3 |
| 1984 | 8931 | 6170 | 2761 | 30.9 | 2741 | 31 | 1791 | 950 | 34.7 | 6190 | 69 | 4379 | 1811 | 29.3 |
| 1985 | 9983 | 6938 | 3045 | 30.5 | 2882 | 29 | 1874 | 1008 | 35.0 | 7101 | 71 | 5064 | 2037 | 28.7 |
| 1986 | 11229 | 7705 | 3524 | 31.4 | 3159 | 28 | 2047 | 1112 | 35.2 | 8070 | 72 | 5658 | 2412 | 29.9 |
| 80-86 | 59,263 | 41,584 | 17,679 | 29.9 | 19,781 | 35 | 12,915 | 6,866 | 34.6 | 39,482 | 65 | 28,669 | 10,813 | 26.7 |
| TOTAL | 166,586 | 124531 | 42,055 | 25.2 | 109,575 | 66 | 79,438 | 30,137 | 27.5 | 57,011 | 34 | 45,093 | 11,918 | 20.9 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

BACHELORS DEGREES IN THE MATHEMATICAL AND COMPUTER SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | | | Mathematical/Computer Sciences Fields | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Mathematics | | | | | Computer & Information Sciences | | | | |
| Year | Total Math/CS | Men | %M | Women | %W | No. | %M/CS | Men | Women | %W | No. | %M/CS | Men | Women | %W |
| 1950 | 6392 | 4946 | 77 | 1446 | 22.6 | 6392 | 100 | 4946 | 1446 | 22.6 | | | | | |
| 1951 | 5753 | 4311 | 75 | 1442 | 25.1 | 5753 | 100 | 4311 | 1442 | 25.1 | | | | | |
| 1952 | 4721 | 3389 | 72 | 1332 | 28.2 | 4721 | 100 | 3389 | 1332 | 28.2 | | | | | |
| 1953 | 4396 | 3122 | 71 | 1274 | 29.0 | 4396 | 100 | 3122 | 1274 | 29.0 | | | | | |
| 1954 | 4090 | 2722 | 67 | 1368 | 33.4 | 4090 | 100 | 2722 | 1368 | 33.4 | | | | | |
| 1955 | 4034 | 2724 | 68 | 1310 | 32.5 | 4034 | 100 | 2724 | 1310 | 32.5 | | | | | |
| 1956 | 4660 | 3137 | 67 | 1523 | 32.7 | 4660 | 100 | 3137 | 1523 | 32.7 | | | | | |
| 1957 | 5546 | 3826 | 69 | 1720 | 31.0 | 5546 | 100 | 3826 | 1720 | 31.0 | | | | | |
| 1958 | 6924 | 4953 | 72 | 1971 | 28.5 | 6924 | 100 | 4953 | 1971 | 28.5 | | | | | |
| 1959 | 9019 | 6504 | 72 | 2515 | 27.9 | 9019 | 100 | 6504 | 2515 | 27.9 | | | | | |
| 50-59 | 55,535 | 39,634 | 71 | 15,901 | 28.6 | 55,535 | 100 | 39,634 | 15,901 | 28.6 | | | | | |
| 1960 | 11437 | 8312 | 73 | 3125 | 27.3 | 11437 | 100 | 8312 | 3125 | 27.3 | | | | | |
| 1961 | 13127 | 9483 | 72 | 3644 | 27.8 | 13127 | 100 | 9483 | 3644 | 27.8 | | | | | |
| 1962 | 14610 | 10355 | 71 | 4255 | 29.1 | 14610 | 100 | 10355 | 4255 | 29.1 | | | | | |
| 1963 | 16121 | 11163 | 69 | 4958 | 30.8 | 16121 | 100 | 11163 | 4958 | 30.8 | | | | | |
| 1964 | 18677 | 12682 | 68 | 5995 | 32.1 | 18677 | 100 | 12682 | 5995 | 32.1 | | | | | |
| 1965 | 19668 | 13215 | 67 | 6453 | 32.8 | 19581 | 100 | 13132 | 6449 | 32.9 | 87 | 0.4 | 83 | 4 | 4.6 |
| 1966 | 20182 | 13480 | 67 | 6702 | 33.2 | 20093 | 100 | 13404 | 6689 | 33.3 | 89 | 0.4 | 76 | 13 | 14.6 |
| 1967 | 21530 | 14196 | 66 | 7334 | 34.1 | 21308 | 99 | 13998 | 7310 | 34.3 | 222 | 1.0 | 198 | 24 | 10.8 |
| 1968 | 24084 | 15243 | 63 | 8841 | 36.7 | 23625 | 98 | 14839 | 8786 | 37.2 | 459 | 1.9 | 404 | 55 | 12.0 |
| 1969 | 28263 | 17915 | 63 | 10348 | 36.6 | 27330 | 97 | 17103 | 10227 | 37.4 | 933 | 3.3 | 812 | 121 | 13.0 |
| 60-69 | 187,699 | 126,044 | 67 | 61,655 | 32.8 | 185,909 | 99 | 124,471 | 61,438 | 33.0 | 1,790 | 1.0 | 1,573 | 217 | 12.1 |
| 1970 | 29109 | 18593 | 64 | 10516 | 36.1 | 27565 | 95 | 17248 | 10317 | 37.4 | 1544 | 5.3 | 1345 | 199 | 12.9 |
| 1971 | 27306 | 17488 | 64 | 9818 | 36.0 | 24918 | 91 | 15424 | 9494 | 38.1 | 2388 | 8.7 | 2064 | 324 | 13.6 |
| 1972 | 27250 | 17466 | 64 | 9784 | 35.9 | 23848 | 88 | 14525 | 9323 | 39.1 | 3402 | 12.5 | 2941 | 461 | 13.6 |
| 1973 | 27528 | 17543 | 64 | 9985 | 36.3 | 23223 | 84 | 13878 | 9345 | 40.2 | 4305 | 15.6 | 3665 | 640 | 14.9 |
| 1974 | 26570 | 16851 | 63 | 9719 | 36.6 | 21813 | 82 | 12874 | 8939 | 41.0 | 4757 | 17.9 | 3977 | 780 | 16.4 |
| 1975 | 23385 | 14729 | 63 | 8656 | 37.0 | 18346 | 78 | 10646 | 7700 | 42.0 | 5039 | 21.5 | 4083 | 956 | 19.0 |
| 1976 | 21749 | 14071 | 65 | 7678 | 35.3 | 16085 | 74 | 9531 | 6554 | 40.7 | 5664 | 26.0 | 4540 | 1124 | 19.8 |
| 1977 | 20729 | 13241 | 64 | 7488 | 36.1 | 14303 | 69 | 8354 | 5949 | 41.6 | 6426 | 31.0 | 4887 | 1539 | 23.9 |
| 1978 | 19925 | 12815 | 64 | 7110 | 35.7 | 12701 | 64 | 7455 | 5246 | 41.3 | 7224 | 36.3 | 5360 | 1864 | 25.8 |
| 1979 | 20670 | 13249 | 64 | 7421 | 35.9 | 11901 | 58 | 6943 | 4958 | 41.7 | 8769 | 42.4 | 6306 | 2463 | 28.1 |
| 70-79 | 244,221 | 156,046 | 64 | 88,175 | 36.1 | 194,703 | 80 | 116,878 | 77,825 | 40.0 | 49,518 | 20.3 | 39,168 | 10,350 | 20.9 |
| 1980 | 22686 | 14439 | 64 | 8247 | 36.4 | 11473 | 51 | 6625 | 4848 | 42.3 | 11213 | 49.4 | 7814 | 3399 | 30.3 |
| 1981 | 26199 | 16544 | 63 | 9655 | 36.9 | 11078 | 42 | 6342 | 4736 | 42.8 | 15121 | 57.7 | 10202 | 4919 | 32.5 |
| 1982 | 31866 | 19811 | 62 | 12055 | 37.8 | 11599 | 36 | 6593 | 5006 | 43.2 | 20267 | 63.6 | 13218 | 7049 | 34.8 |
| 1983 | 36963 | 22601 | 61 | 14362 | 38.9 | 12453 | 34 | 6995 | 5458 | 43.8 | 24510 | 66.3 | 15606 | 8904 | 36.3 |
| 1984 | 45383 | 27612 | 61 | 17771 | 39.2 | 13211 | 29 | 7366 | 5845 | 44.2 | 32172 | 70.9 | 20246 | 11926 | 37.1 |
| 1985 | 54024 | 32743 | 61 | 21281 | 39.4 | 15146 | 28 | 8164 | 6982 | 46.1 | 38878 | 72.0 | 24579 | 14299 | 36.8 |
| 1986 | 58195 | 35648 | 61 | 22547 | 38.7 | 16306 | 28 | 8725 | 7581 | 46.5 | 41889 | 72.0 | 26923 | 14966 | 35.7 |
| 80-86 | 275,316 | 169,398 | 62 | 105,918 | 38.5 | 91,266 | 33 | 50,810 | 40,456 | 44.3 | 184,050 | 66.9 | 118,588 | 65,462 | 35.6 |
| TOTAL | 762,771 | 491,122 | 64 | 271,649 | 35.6 | 527,413 | 69 | 331,793 | 195,620 | 37.1 | 235,358 | 30.9 | 159,329 | 76,029 | 32.3 |

FIELD: Statistics

SOURCE: Earned Degrees Conferred Series, 1947-48 thru 1985-86, Department of Education Center for Statistics

## TABLE 6-31

DEGREES AWARDED BY SEX AND LEVEL OF DEGEE, 1947-48 - 1985-86

| YEAR | BACHELOR'S | | | MASTER's | | | PH.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1955-56 thru 1959-60 | 344 | 78 | 22.7 | 506 | 56 | 11.1 | 170 | 6 | 3.5 |
| 1960-61 thru 1969-70 | 2,355 | 377 | 16.0 | 3,507 | 513 | 14.6 | 965 | 71 | 7.4 |
| 1970-71 | 217 | 55 | 25.3 | 495 | 99 | 20.0 | 185 | 12 | 6.5 |
| 1971-72 | 168 | 47 | 27.9 | 416 | 85 | 20.4 | 173 | 12 | 6.9 |
| 1972-73 | 198 | 69 | 34.8 | 402 | 91 | 22.6 | 156 | 17 | 10.9 |
| 1973-74 | 257 | 94 | 36.6 | 453 | 108 | 23.8 | 147 | 10 | 6.8 |
| 1974-75 | 213 | 68 | 31.9 | 449 | 109 | 24.1 | 158 | 16 | 10.1 |
| 1975-76 | 258 | 92 | 35.7 | 471 | 111 | 23.6 | 141 | 16 | 11.3 |
| 1976-77 | 290 | 126 | 43.4 | 473 | 130 | 27.5 | 142 | 23 | 16.2 |
| 1977-78 | 273 | 107 | 39.2 | 507 | 134 | 26.4 | 153 | 32 | 20.9 |
| 1978-79 | 214 | 82 | 38.3 | 532 | 152 | 28.6 | 142 | 30 | 21.1 |
| 1979-80 | 247 | 104 | 42.1 | 495 | 133 | 26.9 | 115 | 24 | 20.9 |
| 1980-81 | 226 | 95 | 42.0 | 467 | 144 | 30.8 | 144 | 22 | 15.3 |
| 1981-82 | 258 | 106 | 41.1 | 479 | 145 | 30.3 | 125 | 25 | 20.0 |
| 1982-83 | 273 | 133 | 48.7 | 459 | 166 | 36.2 | 128 | 17 | 13.3 |
| 1983-84 | 298 | 131 | 44.0 | 471 | 153 | 32.5 | 149 | 23 | 15.4 |
| 1984-85 | 371 | 151 | 40.7 | 490 | 165 | 33.7 | 137 | 25 | 18.2 |
| 1985-86 | 438 | 195 | 44.5 | 478 | 180 | 37.7 | 146 | 26 | 17.8 |
| TOTAL | 6,898 | 2,093 | 30.3 | 11,540 | 2,674 | 23.2 | 3,476 | 407 | 11.7 |

FIELD: Mathematics

SOURCE: NOTICES of the American Mathematical Society, October 1978, November 1982, November 1984 and November, 1986

## TABLE 6-32

PERCENT WOMEN AMONG DOCTORAL MATHEMATICS FACULTY AND TENURED FACULTY IN DOCTORATE GRANTING DEPARTMENTS BY RANK AND TYPE OF INSTITUTION, SELECTED YEARS, 1978-79 - 1986-87

| Doctorate Granting Departments | Doctoral Degree Rank | 1978-1979 | | 1981-1982 | | 1982-1983 | | 1984-1985 | | 1985-1986 | | 1986-1987 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | All | Tenured | All | Tenured | All | Tenured | All | Tenured | All | Tenured | All | Tenured |
| Group I | Instructor | 7.0 | 0.0 | 11.6 | 0.0 | 11.7 | 0.0 | 12.8 | 66.7 | 9.1 | | 13.1 | |
| | Ass't. Prof. | 9.4 | 33.3 | 7.4 | 66.7 | 8.2 | 0.0 | 9.3 | 0.0 | 9.5 | 50.0 | 10.5 | 0 |
| | Assoc. Prof. | 4.9 | 5.3 | 7.8 | 7.3 | 5.4 | 5.6 | 6.0 | 6.5 | 6.8 | 6.7 | 6.5 | 6.8 |
| | Professor | 1.9 | 1.9 | 2.0 | 2.1 | 2.7 | 2.7 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Group II | Instructor | 12.2 | 0.0 | 9.8 | 0.0 | 24.3 | | 14.5 | 0.0 | 23.5 | | 27.0 | |
| | Ass't. Prof. | 8.2 | 22.2 | 9.6 | 75.0 | 11.3 | 23.5 | 13.3 | 21.4 | 15.3 | 15.4 | 14.3 | 8.3 |
| | Assoc. Prof. | 4.2 | 4.0 | 5.4 | 5.1 | 6.4 | 5.5 | 6.3 | 6.0 | 5.8 | 5.9 | 5.6 | 5.5 |
| | Professor | 2.4 | 2.9 | 2.4 | 2.4 | 2.4 | 2.4 | 2.8 | 2.9 | 3.1 | 3.2 | 3.6 | 3.7 |
| Group III | Instructor | 10.3 | 100.0 | 17.5 | 100.0 | 5.3 | | 28.2 | | 15.8 | 4.0 | 17.0 | 8 |
| | Ass't. Prof. | 11.1 | 6.7 | 10.9 | 7.7 | 10.8 | 8.7 | 12.7 | 17.9 | 14.3 | 12.2 | 15.2 | 11.4 |
| | Assoc. Prof. | 3.9 | 3.6 | 7.3 | 6.9 | 5.5 | 5.3 | 5.9 | 5.7 | 6.1 | 6.6 | 6.8 | 7.6 |
| | Professor | 2.9 | 2.9 | 3.0 | 3.0 | 2.2 | 2.3 | 2.0 | 2.0 | 2.7 | 2.8 | 2.9 | 2.9 |
| Group IV | Instructor | 10.5 | 0.0 | 50.0 | 100.0 | 75.0 | 100.0 | 50.0 | 100.0 | 71.4 | 100.0 | 60.0 | 100 |
| | Ass't. Prof. | 16.7 | 50.0 | 14.9 | 11.1 | 15.2 | 20.0 | 17.8 | 0.0 | 17.1 | 0.0 | 20.4 | 0 |
| | Assoc. Prof. | 25.0 | 33.3 | 9.3 | 9.1 | 8.5 | 6.7 | 9.5 | 8.8 | 9.6 | 8.6 | 9.5 | 9.5 |
| | Professor | 0.0 | 0.0 | 3.7 | 3.4 | 3.8 | 3.8 | 4.4 | 4.2 | 4.3 | 3.9 | 4.0 | 3.5 |
| Group V | Instructor | 11.1 | 100.0 | 14.8 | 0.0 | 100.0 | | 33.3 | | 16.7 | | 16.7 | |
| | Ass't. Prof. | 0.0 | 0.0 | 9.3 | 0.0 | 11.5 | | 0.0 | | 8.8 | 0.0 | 6.3 | 0 |
| | Assoc. Prof. | 50.0 | 0.0 | 4.2 | 4.7 | 5.9 | 7.7 | 0.0 | 0.0 | 6.7 | 3.8 | 4.8 | 0 |
| | Professor | 0.0 | 0.0 | 2.0 | 1.8 | 2.0 | 2.1 | 3.7 | 3.8 | 3.0 | 3.0 | 3.5 | 3.7 |
| Group VI | Instructor | 18.2 | | 0.0 | 0.0 | 50.0 | | 0.0 | | 50.0 | | 100.0 | |
| | Ass't. Prof. | 39.1 | 50.0 | 8.2 | 10.0 | 18.9 | 25.0 | 9.1 | 0.0 | 14.8 | 30.8 | 14.9 | 23.1 |
| | Assoc. Prof. | 8.3 | 9.1 | 2.0 | 1.4 | 3.6 | 3.7 | 5.8 | 5.0 | 5.5 | 5.1 | 6.0 | 5.9 |
| | Professor | 0.0 | 0.0 | 1.3 | 1.3 | 0.7 | 7.0 | 2.0 | 2.0 | 2.4 | 2.4 | 2.4 | 2.4 |
| All Departments | Instructor | 10.3 | 28.6 | 14.5 | 33.3 | 17.0 | 33.3 | 18.6 | 42.9 | 16.1 | 7.7 | 18.8 | 11.5 |
| | Ass't. Prof. | 10.7 | 17.3 | 10.3 | 14.7 | 11.5 | 16.9 | 12.3 | 15.4 | 13.8 | 15.5 | 14.5 | 10.4 |
| | Assoc. Prof. | 4.4 | 4.1 | 6.1 | 5.8 | 5.8 | 5.3 | 6.3 | 6.0 | 6.4 | 6.3 | 6.5 | 6.6 |
| | Professor | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | 2.9 | 2.9 | 3.1 | 3.1 | 3.3 | 3.2 |
| All Doctorate Departments All Ranks | Instructor | | | | | | | | | | | | |
| | Ass't. Prof. | | | | | | | | | | | | |
| | Assoc. Prof. | | | | | | | | | | | | |
| | Professor | 5.3 | 3.7 | 5.5 | 3.9 | 5.8 | 3.5 | 6.0 | 4.0 | 6.4 | 4.3 | 6.8 | 4.4 |

FIELD: Mathematics

SOURCE: NOTICES of the American Mathematical Society, October 1978, November 1982, November 1984 and November, 1986

## TABLE 6-33

PERCENT WOMEN AMONG FACULTY AND TENURED FACULTY IN NON-DOCTORATE GRANTING DEPARTMENTS BY RANK AND TYPE OF INSTITUTION, SELECTED YEARS, 1978-79 - 1986-87

| Type of Institution | Rank | 1978-1979 | | 1981-1982 | | 1982-1983 | | 1984-1985 | | 1985-1986 | | 1986-1987 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | All | Tenured | All | Tenured | All | Tenured | All | Tenured | All | Tenured | All | Tenured |
| MASTER'S DEGREE Without Doctorate | Instructor | 48.6 | 38.1 | 50.0 | 45.5 | 55.9 | 55.0 | 60.0 | 48.4 | 59.9 | 42.9 | 57.4 | 39.3 |
| | Ass't. Prof. | 22.7 | 21.3 | 24.1 | 21.0 | 25.2 | 20.8 | 24.9 | 24.4 | 26.8 | 19.3 | 26.4 | 18.6 |
| | Assoc. Prof. | 12.2 | 12.3 | 12.3 | 11.8 | 18.6 | 18.9 | 12.4 | 12.8 | 12.7 | 13.0 | 12.5 | 11.8 |
| | Professor | 6.7 | 6.7 | 5.1 | 5.1 | 12.5 | 12.5 | 7.7 | 7.7 | 10.2 | 10.4 | 14.3 | 12.8 |
| With Doctorate | Instructor | 26.5 | | 28.6 | 50.0 | 14.8 | 0.0 | 16.9 | 16.7 | 23.9 | 20.0 | 31.3 | 33.3 |
| | Ass't. Prof. | 12.4 | 10.1 | 15.7 | 8.2 | 18.5 | 20.3 | 15.3 | 7.9 | 16.2 | 26.2 | 18.1 | 18.6 |
| | Assoc. Prof. | 6.6 | 6.5 | 8.2 | 7.6 | 10.1 | 10.1 | 11.7 | 11.5 | 12.8 | 13.3 | 12.9 | 13.2 |
| | Professor | 5.8 | 5.7 | 6.8 | 6.3 | 6.9 | 6.5 | 6.0 | 6.1 | 6.9 | 6.9 | 7.3 | 7.4 |
| BACHELOR'S DEGREE Without Doctorate | Instructor | 40.1 | 50.0 | 46.8 | 42.9 | 52.8 | 37.5 | 52.7 | 16.7 | 47.1 | 28.6 | 42.3 | 37.5 |
| | Ass't. Prof. | 25.9 | 20.8 | 25.1 | 23.5 | 29.6 | 29.6 | 25.8 | 20.5 | 31.9 | 31.9 | 32.3 | 33.0 |
| | Assoc. Prof. | 13.0 | 13.0 | 13.1 | 12.1 | 13.3 | 14.5 | 12.2 | 9.7 | 13.1 | 12.2 | 15.4 | 13.4 |
| | Professor | 11.4 | 11.9 | 9.9 | 10.4 | 9.4 | 9.8 | 13.7 | 14.0 | 12.5 | 13.3 | 19.4 | 15.6 |
| With Doctorate | Instructor | 31.6 | 0.0 | 35.7 | 0.0 | 10.5 | 0.0 | 27.8 | 0.0 | 30.8 | 0.0 | 25.0 | 0.0 |
| | Ass't. Prof. | 12.6 | 7.9 | 18.9 | 9.8 | 20.2 | 9.4 | 24.9 | 16.9 | 25.8 | 21.3 | 24.8 | 20.0 |
| | Assoc. Prof. | 10.9 | 10.5 | 11.3 | 11.5 | 9.0 | 6.6 | 11.0 | 9.6 | 12.5 | 11.8 | 12.3 | 13.7 |
| | Professor | 8.3 | 8.8 | 7.6 | 7.0 | 9.8 | 9.7 | 8.5 | 8.6 | 10.9 | 10.0 | 10.5 | 9.6 |
| ALL INSTITUTIONS** | | | | | | | | | | | | | |
| Without Doctorate | | 25.5 | 18.7 | 29.9 | 18.1 | 34.9 | 20.8 | 37.8 | 18.5 | 37.9 | 18.6 | 36.2 | 19.6 |
| With Doctorate | | 6.7 | 4.9 | 7.7 | 5.5 | 8.2 | 5.7 | 8.6 | 6.1 | 9.2 | 6.6 | 9.5 | 6.8 |
| TOTAL | | 9.9 | 7.1 | 11.5 | 7.2 | 12.9 | 7.6 | 13.6 | 7.3 | 14.5 | 8.0 | 14.1 | 8.2 |

*Number of institutions reporting varies markedly from year to year. Thus numbers reported are not as representative of trends as are the percentages recorded in this table.

** Includes information on doctorate granting institutions shown in preceding table

FIELD: Mathematics, Statistics and Computer Specialties

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, September 30, 1986

## TABLE 6-34

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN MATHEMATICS, STATISTICS AND COMPUTER SPECIALTIES BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, September 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | AM. INDIAN | | ASIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | % | Women | % W | No. | % B | No. | % H | No. | % I | No. | % A | No. | % W |
| Actuary | 130 | 23 | 17.7 | 16 | 12.3 | 3 | 2.3 | 7 | 5.4 | 4 | 3.1 | 5 | 3.8 | 0 | 0.0 | 114 | 87.7 |
| Operations Research | 3,957 | 650 | 16.4 | 375 | 9.5 | 95 | 2.4 | 171 | 4.3 | 85 | 2.1 | 104 | 2.6 | 15 | 0.4 | 3,582 | 90.5 |
| Mathematics | 3,127 | 827 | 26.4 | 407 | 13.0 | 142 | 4.5 | 213 | 6.8 | 87 | 2.8 | 96 | 3.1 | 11 | 0.4 | 2,720 | 87.0 |
| Mathematical Statistician | 1,019 | 274 | 26.9 | 183 | 18.0 | 71 | 7.0 | 73 | 7.2 | 18 | 1.8 | 89 | 8.7 | 3 | 0.3 | 836 | 82.0 |
| Statistican | 2,666 | 895 | 33.6 | 183 | 18.0 | 248 | 9.3 | 307 | 11.5 | 68 | 2.6 | 77 | 2.9 | 5 | 0.2 | 2,209 | 82.9 |
| Cryptographer | 9 | 4 | 44.4 | 2 | 22.2 | 1 | 11.1 | 2 | 22.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 77.8 |
| Computer Science | 2,062 | 613 | 29.7 | 261 | 12.7 | 118 | 5.7 | 121 | 5.9 | 27 | 1.3 | 108 | 5.2 | 5 | 0.2 | 1,801 | 87.3 |
| Computer Operation | 10,041 | 5,095 | 50.7 | 3,804 | 37.9 | 2,127 | 21.2 | 2,861 | 18.5 | 520 | 5.2 | 297 | 3.0 | 126 | 1.3 | 6,237 | 62.1 |

SOURCE: "30th Annual AMS Survey 1986, First Report," The American Mathematical Society Notices, Nov. 1986

## TABLE 6-35

U.S. CITIZEN DOCTORATES IN THE MATHEMATICAL SCIENCES BY SEX, 1972-73 - 1985-86

| YEAR | ADJUSTED TOTAL* | U.S. CITIZENS | | | | |
|---|---|---|---|---|---|---|
| | | TOTAL | % | MEN | WOMEN | % W |
| 1972-73 | 986 | 774 | 78.5 | 696 | 78 | 10.1 |
| 1973-74 | 938 | 677 | 72.2 | 618 | 59 | 8.7 |
| 1974-75 | 999 | 741 | 74.2 | 658 | 83 | 11.2 |
| 1975-76 | 965 | 722 | 74. | 636 | 86 | 11.9 |
| 1976-77 | 901 | 689 | 76.5 | 602 | 87 | 12.6 |
| 1977-78 | 868 | 634 | 73.0 | 545 | 89 | 14.0 |
| 1978-79 | 806 | 596 | 73.9 | 503 | 93 | 15.6 |
| 1979-80 | 791 | 578 | 73.1 | 491 | 87 | 15.1 |
| 1980-81 | 839 | 567 | 67.6 | 465 | 102 | 18.0 |
| 1981-82 | 798 | 519 | 65.0 | 431 | 88 | 17.0 |
| 1982-83† | 744 | 455 | 61.2 | 366 | 89 | 19.6 |
| 1983-84† | 738 | 433 | 58.7 | 346 | 87 | 20.1 |
| 1984-85† | 726 | 396 | 54.5 | 315 | 81 | 20.4 |
| 1985-86† | 755 | 386 | 51.1 | 304 | 82 | 21.2 |

*Includes only those for whom citizenship is known.

†Does not include Computer Science degrees.

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SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 7-1

### PHD AWARDS IN ENGINEERING BY SUBFIELD AND SEX, 1960-86

| | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| Fields | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL | 19070 | 77 | 0.4 | 30338 | 426 | 1.4 | 16512 | 786 | 4.8 | 3165 | 198 | 6.3 | 3376 | 225 | 6.7 |
| Aerospace/astronautical(1) | 948 | 6 | 0.6 | 1460 | 16 | 1.1 | 613 | 11 | 1.8 | 124 | 5 | 4.0 | 118 | 1 | 0.8 |
| Agricultural | 283 | 0 | 0.0 | 546 | 2 | 0.4 | 372 | 10 | 2.7 | 60 | 3 | 5.0 | 52 | 1 | 1.9 |
| Bioengineering & biomed(2) | 37 | 0 | 0.0 | 698 | 13 | 1.9 | 404 | 40 | 9.9 | 69 | 11 | 15.9 | 67 | 9 | 13.4 |
| Ceramic | 296 | 3 | 1.0 | 297 | 8 | 2.7 | 136 | 9 | 6.6 | 19 | | 0.0 | 25 | 3 | 12.0 |
| Chemical | 2969 | 17 | 0.6 | 3555 | 52 | 1.5 | 2037 | 124 | 6.1 | 440 | 35 | 8.0 | 476 | 53 | 11.1 |
| Civil | 1924 | 7 | 0.4 | 3078 | 34 | 1.1 | 1897 | 73 | 3.8 | 357 | 18 | 5.0 | 387 | 19 | 4.9 |
| Communications(3) | | | | | | | 66 | 2 | 3.0 | 30 | 2 | 6.7 | 23 | 0 | 0.0 |
| Computer(4) | | | | 498 | 32 | 6.4 | 400 | 28 | 7.0 | 56 | 5 | 8.9 | 77 | 5 | 6.5 |
| Electrical, Electronics(5) | | | | | | | 1652 | 47 | 2.8 | 629 | 27 | 4.3 | 707 | 33 | 4.7 |
| Electrical(5) | 3941 | 11 | 0.3 | 5777 | 60 | 1.0 | 1359 | 44 | 3.2 | 2 | 1 | 50.0 | | | |
| Electronics(5) | 937 | 3 | 0.3 | 966 | 10 | 1.0 | 230 | 3 | 1.3 | | | | | | |
| Engineering mechanics | 1501 | 7 | 0.5 | 1557 | 15 | 1.0 | 519 | 24 | 4.6 | 88 | 4 | 4.5 | 96 | 4 | 4.3 |
| Engineering physics(6) | 780 | 2 | 0.3 | 267 | 5 | 1.9 | 82 | 3 | 3.7 | 12 | 1 | 8.3 | 13 | 0 | 0.0 |
| Engineering science(3) | | | | | | | 89 | 1 | 1.1 | 31 | | 0.0 | 30 | 3 | 10.0 |
| Environmental health eng(7) | 365 | 2 | 0.5 | 667 | 13 | 1.9 | 330 | 23 | 7.0 | 33 | 2 | 6.1 | 42 | 2 | 4.8 |
| Industrial | 454 | 4 | 0.9 | 959 | 21 | 2.2 | 484 | 47 | 9.7 | 92 | 6 | 6.5 | 101 | 14 | 13.9 |
| Materials science | 22 | 0 | 0.0 | 1047 | 30 | 2.9 | 916 | 91 | 9.9 | 188 | 23 | 12.2 | 187 | 18 | 9.6 |
| Mechanical | 2291 | 2 | 0.1 | 3409 | 25 | 0.7 | 1980 | 55 | 2.8 | 424 | 22 | 5.2 | 442 | 14 | 3.2 |
| Metallurgical(8) | 1442 | 7 | 0.5 | 1393 | 13 | 0.9 | 552 | 36 | 6.5 | 96 | 9 | 9.4 | 93 | 3 | 3.2 |
| Mining & Mineral(9) | 10 | 0 | 0.0 | 81 | 0 | 0.0 | 73 | 2 | 2.7 | 16 | 0 | 0.0 | 22 | 2 | 9.1 |
| Naval arch, marine engin(3) | | | | | | | 17 | 0 | 0.0 | 8 | 0 | 0.0 | 9 | 0 | 0.0 |
| Nuclear (6) | 120 | 0 | 0.0 | 1125 | 18 | 1.6 | 682 | 28 | 4.1 | 96 | 3 | 3.1 | 97 | 6 | 6.2 |
| Ocean (3) | | | | | | | 48 | | 0.0 | 25 | 0 | 0.0 | 14 | 0 | 0.0 |
| Operations research | | | | 693 | 20 | 2.9 | 349 | 30 | 8.6 | 54 | 8 | 14.8 | 54 | 11 | 20.4 |
| Petroleum (10) | | | | 117 | 3 | 2.6 | 142 | 2 | 1.4 | 24 | 0 | 0.0 | 18 | 1 | 5.6 |
| Polymer (3) | | | | | | | 92 | 9 | 9.8 | 40 | 6 | 15.0 | 36 | 7 | 19.4 |
| Systems (11) | | | | 357 | 7 | 2.0 | 344 | 17 | 4.9 | 57 | 4 | 7.0 | 33 | 2 | 6.1 |
| Engineering, general | 124 | 1 | 0.8 | 384 | 4 | 1.0 | 192 | 8 | 4.2 | 26 | 0 | 0.0 | 55 | 5 | 9.1 |
| Engineering, other | 626 | 5 | 0.8 | 1407 | 25 | 1.8 | 455 | 19 | 4.2 | 69 | 3 | 4.3 | 104 | 9 | 8.7 |

(1) Originally "Aeronautical engineering", "Astronautical" added in 1966 and "Aerospace" added in 1983. "Biomedical introduced in 1969. "Bioengineering" added in 1983. (3) Introduced in 1983. (4) Introduced in 1975. (5) These two subfields were merged in 1983. (6) In 1961 "Nuclear engineering" was dropped and previous cases added to "Engineering physics." In 1969 "Nuclear engineering: was reinstated. (7) Called "Sanitary and environmental: before 1983. (8) Originally "Metallurgy and metallurgical engineering", the term :Physical" was introduced in 1967 and changed to "metallurgical: in 1983. (9) "Mining engineering" dropped in 1961, restored in 1969, and renamed "Mining and mineral" in 1983. (10) "Fuel technology" and petroleum engineering" introduced in 1973, renamed "Petroleum" in 1983. (11) Introduced as "Systems design and and systems science" in 1975, renamed "Systems" in 1983.

FIELD: Engineering

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report, NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council, 1981-1987

TABLE 7-2

NUMBER OF Ph.D. RECIPIENTS IN ENGINEERING BY TYPE OF CITIZENSHIP, 1960-1986

| YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship not Known |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 794 | 607 | 183 | 54 | 129 | 4 |
| 1961 | 940 | 732 | 202 | 48 | 154 | 6 |
| 1962 | 1,216 | 949 | 259 | 41 | 218 | 8 |
| 1963 | 1,357 | 1,062 | 280 | 65 | 215 | 15 |
| 1964 | 1,664 | 1,313 | 331 | 84 | 247 | 20 |
| 1965 | 2,074 | 1,603 | 430 | 111 | 319 | 41 |
| 1966 | 2,301 | 1,718 | 501 | 116 | 385 | 82 |
| 1967 | 2,604 | 1,957 | 607 | 198 | 409 | 40 |
| 1968 | 2,848 | 2,134 | 680 | 244 | 436 | 34 |
| 1969 | 3,251 | 2,416 | 780 | 320 | 460 | 55 |
| 1970 | 3,433 | 2,542 | 872 | 401 | 471 | 19 |
| 1971 | 3,500 | 2,436 | 1,032 | 513 | 519 | 32 |
| 1972 | 3,476 | 2,307 | 1,137 | 619 | 518 | 32 |
| 1973 | 3,339 | 2,126 | 1,170 | 552 | 618 | 43 |
| 1974 | 3,121 | 1,735 | 1,208 | 507 | 701 | 178 |
| 1975 | 2,961 | 1,685 | 1,223 | 413 | 810 | 53 |
| 1976 | 2,791 | 1,532 | 1,183 | 384 | 799 | 76 |
| 1977 | 2,641 | 1,468 | 1,098 | 325 | 773 | 75 |
| 1978 | 2,423 | 1,259 | 1,092 | 325 | 767 | 72 |
| 1979 | 2,494 | 1,294 | 1,138 | 322 | 816 | 62 |
| 1980 | 2,479 | 1,254 | 1,148 | 298 | 850 | 77 |
| 1981 | 2,528 | 1,168 | 1,241 | 298 | 943 | 119 |
| 1982 | 2,644 | 1,165 | 1,324 | 296 | 1,028 | 155 |
| 1983 | 2,780 | 1,154 | 1,488 | 319 | 1,169 | 138 |
| 1984 | 2,915 | 1,239 | 1,542 | 274 | 1,268 | 134 |
| 1985 | 3,165 | 1,278 | 1,729 | 316 | 1,413 | 158 |
| 1986 | 3,376 | 1,377 | 1,715 | 344 | 1,371 | 284 |

SOURCE: Series of Earned Degrees Conferred, Department of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 7-3

PhD DEGREES IN ENGINEERING BY SEX AND SUBFIELD (1950 - 1986)

| | | | Engineering Fields | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Aeronautical | | | | Chemical | | | | Civil | | | | Electrical | | | | Industrial | | | | Mechanical | | | | Other | | | |
| Year | Total Eng | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W |
| 1950 | 417 | 1 | 0.2 | 23 | 6 | 0 | 0.0 | 173 | 41 | 1 | 0.6 | 28 | 7 | 0 | 0.0 | 80 | 19 | 0 | 0.0 | | | | | 46 | 11 | 0 | 0.0 | 67 | 16 | 0 | 0.0 |
| 1951 | 520 | 1 | 0.2 | 26 | 5 | 1 | 3.8 | 171 | 33 | 0 | 0.0 | 52 | 10 | 0 | 0.0 | 113 | 22 | 0 | 0.0 | | | | | 67 | 13 | 0 | 0.0 | 91 | 18 | 0 | 0.0 |
| 1952 | 529 | 3 | 0.6 | 25 | 5 | 0 | 0.0 | 168 | 32 | 0 | 0.0 | 45 | 9 | 0 | 0.0 | 120 | 23 | 3 | 2.5 | | | | | 72 | 14 | 0 | 0.0 | 99 | 19 | 0 | 0.0 |
| 1953 | 518 | 1 | 0.2 | 32 | 6 | 0 | 0.0 | 147 | 28 | 0 | 0.0 | 40 | 8 | 0 | 0.0 | 132 | 25 | 1 | 0.8 | | | | | 84 | 16 | 0 | 0.0 | 83 | 16 | 0 | 0.0 |
| 1954 | 594 | 1 | 0.2 | 43 | 7 | 0 | 0.0 | 133 | 22 | 0 | 0.0 | 43 | 7 | 0 | 0.0 | 111 | 19 | 0 | 0.0 | 6 | 1 | 1 | 16.7 | 72 | 12 | 0 | 0.0 | 186 | 31 | 0 | 0.0 |
| 1955 | 599 | 0 | 0.0 | 23 | 4 | 0 | 0.0 | 139 | 23 | 0 | 0.0 | 29 | 5 | 0 | 0.0 | 141 | 24 | 0 | 0.0 | 9 | 2 | 0 | 0.0 | 79 | 13 | 0 | 0.0 | 179 | 30 | 0 | 0.0 |
| 1956 | 610 | 0 | 0.0 | 36 | 6 | 0 | 0.0 | 136 | 22 | 0 | 0.0 | 59 | 10 | 0 | 0.0 | 136 | 22 | 0 | 0.0 | 10 | 2 | 0 | 0.0 | 61 | 10 | 0 | 0.0 | 172 | 28 | 0 | 0.0 |
| 1957 | 596 | 1 | 0.2 | 32 | 5 | 0 | 0.0 | 146 | 24 | 0 | 0.0 | 39 | 7 | 0 | 0.0 | 130 | 22 | 0 | 0.0 | 17 | 3 | 0 | 0.0 | 67 | 11 | 0 | 0.0 | 165 | 28 | 1 | 0.6 |
| 1958 | 647 | 4 | 0.6 | 26 | 4 | 1 | 3.8 | 127 | 20 | 1 | 0.8 | 69 | 11 | 0 | 0.0 | 144 | 22 | 1 | 0.7 | 9 | 1 | 0 | 0.0 | 76 | 12 | 0 | 0.0 | 196 | 30 | 1 | 0.5 |
| 1959 | 714 | 1 | 0.1 | 24 | 3 | 0 | 0.0 | 143 | 20 | 0 | 0.0 | 70 | 10 | 0 | 0.0 | 189 | 26 | 0 | 0.0 | 12 | 2 | 0 | 0.0 | 83 | 12 | 1 | 0.0 | 193 | 27 | 0 | 0.0 |
| 50-59 | 5,744 | 13 | 0.2 | 290 | 5 | 2 | 0.7 | 1,483 | 26 | 2 | 0.1 | 474 | 8 | 0 | 0.0 | 1,296 | 23 | 5 | 0.4 | 65 | 1 | 1 | 1.6 | 707 | 12 | 1 | 0.0 | 1,431 | 25 | 2 | 0.1 |
| 1960 | 786 | 3 | 0.4 | 23 | 3 | 1 | 4.3 | 170 | 22 | 0 | 0.0 | 74 | 9 | 1 | 1.4 | 205 | 26 | 1 | 0.5 | 13 | 2 | 0 | 0.0 | 107 | 14 | 0 | 0.0 | 196 | 25 | 0 | 0.0 |
| 1961 | 943 | 6 | 0.6 | 42 | 4 | 1 | 2.4 | 171 | 18 | 0 | 0.0 | 117 | 12 | 1 | 0.9 | 250 | 27 | 1 | 0.4 | 19 | 2 | 0 | 0.0 | 106 | 11 | 0 | 0.0 | 238 | 25 | 3 | 1.3 |
| 1962 | 1,207 | 4 | 0.3 | 54 | 4 | 0 | 0.0 | 225 | 19 | 1 | 0.4 | 145 | 12 | 0 | 0.0 | 295 | 24 | 1 | 0.3 | 26 | 2 | 1 | 3.8 | 159 | 13 | 0 | 0.0 | 303 | 25 | 1 | 0.3 |
| 1963 | 1,378 | 11 | 0.8 | 70 | 5 | 3 | 4.3 | 238 | 17 | 2 | 0.8 | 162 | 10 | 2 | 1.4 | 386 | 28 | 2 | 0.5 | 23 | 2 | 0 | 0.0 | 164 | 12 | 0 | 0.0 | 355 | 26 | 2 | 0.6 |
| 1964 | 1,693 | 7 | 0.4 | 72 | 4 | 1 | 1.4 | 262 | 15 | 1 | 0.4 | 218 | 13 | 1 | 0.5 | 460 | 27 | 2 | 0.4 | 32 | 2 | 0 | 0.0 | 200 | 12 | 0 | 0.0 | 449 | 27 | 2 | 0.4 |
| 1965 | 2,124 | 10 | 0.5 | 91 | 4 | 0 | 0.0 | 364 | 17 | 2 | 0.5 | 252 | 12 | 2 | 0.8 | 511 | 24 | 2 | 0.4 | 61 | 3 | 1 | 1.6 | 265 | 12 | 0 | 0.0 | 580 | 27 | 3 | 0.5 |
| 1966 | 2,304 | 9 | 0.4 | 105 | 5 | 0 | 0.0 | 354 | 15 | 3 | 0.8 | 283 | 12 | 1 | 0.4 | 569 | 25 | 2 | 0.4 | 45 | 2 | 0 | 0.0 | 289 | 13 | 0 | 0.0 | 659 | 29 | 3 | 0.5 |
| 1967 | 2,614 | 11 | 0.4 | 142 | 5 | 0 | 0.0 | 305 | 12 | 2 | 0.7 | 296 | 11 | 1 | 0.3 | 668 | 26 | 0 | 0.0 | 64 | 2 | 2 | 3.1 | 354 | 14 | 1 | 0.0 | 785 | 30 | 5 | 0.6 |
| 1968 | 2,932 | 12 | 0.4 | 162 | 6 | 1 | 0.6 | 367 | 13 | 3 | 0.8 | 376 | 13 | 0 | 0.0 | 723 | 25 | 0 | 0.0 | 79 | 3 | 2 | 2.5 | 395 | 13 | 1 | 0.0 | 830 | 28 | 5 | 0.6 |
| 1969 | 3,377 | 12 | 0.4 | 207 | 6 | 0 | 0.0 | 409 | 12 | 3 | 0.7 | 381 | 11 | 0 | 0.0 | 862 | 26 | 4 | 0.5 | 115 | 3 | 0 | 0.0 | 425 | 13 | 0 | 0.0 | 978 | 29 | 5 | 0.5 |
| 60-69 | 19,358 | 85 | 0.4 | 968 | 5 | 7 | 0.7 | 2,865 | 15 | 17 | 0.6 | 2,284 | 12 | 9 | 0.4 | 4,927 | 25 | 15 | 0.3 | 477 | 2 | 6 | 1.3 | 2,464 | 13 | 2 | 0.0 | 5,373 | 28 | 29 | 0.5 |
| 1970 | 3,681 | 24 | 0.7 | 211 | 6 | 2 | 0.9 | 438 | 12 | 4 | 0.9 | 411 | 11 | 2 | 0.5 | 882 | 24 | 3 | 0.3 | 126 | 3 | 3 | 2.4 | 435 | 12 | 0 | 0.0 | 1,178 | 32 | 10 | 0.8 |
| 1971 | 3,654 | 23 | 0.6 | 217 | 6 | 3 | 1.4 | 406 | 11 | 2 | 0.5 | 446 | 12 | 3 | 0.7 | 879 | 24 | 3 | 0.3 | 139 | 4 | 3 | 2.2 | 438 | 12 | 0 | 0.0 | 1,129 | 31 | 9 | 0.8 |
| 1972 | 3,704 | 25 | 0.7 | 197 | 5 | 0 | 0.0 | 394 | 11 | 1 | 0.3 | 415 | 11 | 2 | 0.5 | 824 | 22 | 3 | 0.4 | 168 | 5 | 0 | 0.0 | 411 | 11 | 1 | 0.0 | 1,295 | 35 | 18 | 1.4 |
| 1973 | 3,560 | 64 | 1.8 | 171 | 5 | 1 | 0.6 | 397 | 11 | 2 | 0.5 | 397 | 11 | 9 | 2.3 | 791 | 22 | 9 | 1.1 | 130 | 4 | 3 | 2.3 | 370 | 10 | 3 | 0.8 | 1,304 | 37 | 37 | 2.8 |
| 1974 | 3,336 | 55 | 1.6 | 173 | 5 | 3 | 1.7 | 400 | 12 | 10 | 2.5 | 368 | 11 | 4 | 1.1 | 705 | 21 | 8 | 1.1 | 146 | 4 | 2 | 1.4 | 385 | 12 | 6 | 0.0 | 1,159 | 35 | 22 | 1.9 |
| 1975 | 3,151 | 67 | 2.1 | 163 | 5 | 2 | 1.2 | 346 | 11 | 4 | 1.2 | 356 | 11 | 9 | 2.5 | 701 | 22 | 11 | 1.6 | 119 | 4 | 5 | 4.2 | 340 | 11 | 4 | 0.0 | 1,126 | 36 | 32 | 2.8 |
| 1976 | 2,835 | 69 | 2.4 | 139 | 5 | 2 | 1.4 | 308 | 11 | 9 | 2.9 | 370 | 13 | 9 | 2.4 | 649 | 23 | 14 | 2.2 | 121 | 4 | 3 | 2.5 | 305 | 11 | 2 | 0.0 | 943 | 33 | 30 | 3.2 |
| 1977 | 2,599 | 74 | 2.8 | 119 | 5 | 4 | 3.4 | 291 | 11 | 8 | 2.7 | 309 | 12 | 6 | 1.9 | 566 | 22 | 18 | 3.2 | 104 | 4 | 5 | 4.8 | 283 | 11 | 3 | 0.4 | 927 | 36 | 30 | 3.2 |
| 1978 | 2,442 | 57 | 2.3 | 115 | 5 | 2 | 1.7 | 259 | 11 | 7 | 2.7 | 277 | 11 | 6 | 2.2 | 503 | 21 | 13 | 2.6 | 118 | 5 | 5 | 4.2 | 279 | 11 | 6 | 0.4 | 891 | 36 | 18 | 2.0 |
| 1979 | 2,517 | 83 | 3.3 | 95 | 4 | 0 | 0.0 | 304 | 12 | 8 | 2.6 | 253 | 10 | 4 | 1.6 | 586 | 23 | 14 | 2.4 | 149 | 6 | 14 | 9.4 | 271 | 11 | 3 | 0.0 | 859 | 34 | 40 | 4.7 |
| 70-79 | 31,479 | 541 | 1.7 | 1,600 | 5 | 19 | 1.2 | 3,543 | 11 | 55 | 1.6 | 3,602 | 11 | 54 | 1.5 | 7,086 | 23 | 96 | 1.4 | 1,320 | 4 | 43 | 3.3 | 3,517 | 11 | 28 | 0.0 | 10,811 | 34 | 246 | 2.3 |
| 1980 | 2,519 | 96 | 3.8 | 99 | 4 | 1 | 1.0 | 284 | 11 | 15 | 5.3 | 270 | 11 | 6 | 2.2 | 525 | 21 | 14 | 2.7 | 116 | 5 | 7 | 6.0 | 281 | 11 | 4 | 0.0 | 944 | 37 | 49 | 5.2 |
| 1981 | 2,551 | 104 | 4.1 | 109 | 4 | 1 | 0.9 | 300 | 12 | 13 | 4.3 | 325 | 13 | 9 | 2.8 | 535 | 21 | 20 | 3.7 | 112 | 4 | 9 | 8.0 | 276 | 11 | 7 | 0.0 | 894 | 35 | 45 | 5.0 |
| 1982 | 2,621 | 138 | 5.3 | 96 | 4 | 1 | 1.0 | 311 | 12 | 19 | 6.1 | 329 | 13 | 14 | 4.3 | 526 | 20 | 21 | 4.0 | 116 | 4 | 13 | 11.2 | 333 | 13 | 13 | 0.3 | 910 | 35 | 57 | 6.3 |
| 1983 | 2,822 | 125 | 4.4 | 90 | 3 | 2 | 2.2 | 319 | 11 | 21 | 6.6 | 340 | 12 | 13 | 3.8 | 550 | 19 | 9 | 1.6 | 118 | 4 | 11 | 9.3 | 299 | 11 | 8 | 1.0 | 1,106 | 39 | 61 | 5.5 |
| 1984 | 2,979 | 165 | 5.5 | 106 | 4 | 2 | 1.9 | 330 | 11 | 19 | 5.8 | 369 | 12 | 24 | 6.5 | 585 | 20 | 14 | 2.4 | 119 | 4 | 17 | 14.3 | 319 | 11 | 7 | 1.9 | 1,151 | 39 | 82 | 7.1 |
| 1985 | 3,221 | 207 | 6.4 | 110 | 3 | 4 | 3.6 | 418 | 13 | 39 | 9.3 | 377 | 12 | 21 | 5.6 | 660 | 20 | 28 | 4.2 | 139 | 4 | 14 | 10.1 | 409 | 13 | 24 | 1.5 | 1,108 | 34 | 77 | 6.9 |
| 1986 | 3,400 | 228 | 6.7 | 112 | 3 | 2 | 1.8 | 446 | 13 | 50 | 11.2 | 395 | 12 | 29 | 7.3 | 722 | 21 | 39 | 5.4 | 130 | 4 | 19 | 14.6 | 426 | 13 | 11 | 0.7 | 1,169 | 34 | 78 | 6.7 |
| 80-86 | 20,113 | 1,063 | 5.0 | 722 | 4 | 13 | 1.8 | 2,408 | 12 | 176 | 7.3 | 2,405 | 12 | 116 | 4.8 | 4,103 | 20 | 145 | 3.5 | 850 | 4 | 90 | 10.6 | 2,545 | 12 | 74 | 3.2 | 7,282 | 36 | 449 | 6.2 |
| TOTAL | 73,294 | 1474 | 2.0 | 3,468 | 5 | 39 | 1.1 | 10,299 | 14 | 250 | 2.4 | 8,765 | 12 | 179 | 2.0 | 17,412 | 24 | 261 | 1.5 | 2,710 | 4 | 140 | 5.2 | 9,031 | 12 | 1051 | 2 | 24,897 | 34 | 726 | 2.9 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 7-3 (continued)

MASTERS DEGREES IN ENGINEERING BY SUBFIELD AND SEX, 1950-1986

| | | | | Engineering Fields | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Aero/Astro | | | | Chemical | | | | Civil | | | | Electrical | | | | Industrial | | | | Mechanical | | | | Other | | | |
| Year | Total Eng | Women | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W |
| 1950 | 4496 | 15 | 0.3 | 373 | 8 | 1 | 0.3 | 699 | 16 | 1 | 0.1 | 689 | 15 | 3 | 0.4 | 1057 | 24 | 2 | 0.2 | | | | | 784 | 17 | 3 | 0.4 | 894 | 20 | 5 | ~0.6 |
| 1951 | 4825 | 10 | 0.2 | 332 | 7 | 1 | 0.3 | 740 | 15 | 2 | 0.3 | 630 | 13 | 1 | 0.2 | 1114 | 23 | 0 | 0.0 | | | | | 913 | 19 | 3 | 0.3 | 1096 | 23 | 3 | 0.3 |
| 1952 | 4091 | 18 | 0.4 | 231 | 6 | 0 | 0.0 | 587 | 14 | 5 | 0.9 | 583 | 14 | 1 | 0.2 | 1008 | 25 | 3 | 0.3 | | | | | 660 | 16 | 4 | 0.6 | 1022 | 25 | 5 | 0.5 |
| 1953 | 3566 | 13 | 0.4 | 210 | 6 | 1 | 0.5 | 431 | 12 | 2 | 0.5 | 566 | 16 | 1 | 0.2 | 880 | 25 | 1 | 0.1 | | | | | 667 | 19 | 0 | 0.0 | 812 | 23 | 8 | 1.0 |
| 1954 | 4204 | 15 | 0.4 | 219 | 5 | 1 | 0.5 | 448 | 11 | 2 | 0.4 | 565 | 13 | 3 | 0.5 | 978 | 23 | 1 | 0.1 | 375 | 9 | 2 | 0.5 | 723 | 17 | 0 | 0.0 | 896 | 21 | 6 | 0.7 |
| 1955 | 4484 | 13 | 0.3 | 204 | 5 | 2 | 1.0 | 470 | 10 | 1 | 0.2 | 693 | 15 | 3 | 0.4 | 1074 | 24 | 2 | 0.2 | 373 | 8 | 1 | 0.3 | 759 | 17 | 1 | 0.1 | 911 | 20 | 3 | 0.3 |
| 1956 | 4724 | 19 | 0.4 | 216 | 5 | 3 | 1.4 | 545 | 12 | 3 | 0.6 | 822 | 17 | 1 | 0.1 | 1161 | 25 | 3 | 0.3 | 354 | 7 | 0 | 0.0 | 765 | 16 | 2 | 0.3 | 861 | 18 | 7 | 0.8 |
| 1957 | 5233 | 16 | 0.3 | 256 | 5 | 2 | 0.8 | 402 | 8 | 1 | 0.2 | 850 | 16 | 4 | 0.5 | 1312 | 25 | 2 | 0.2 | 395 | 8 | 1 | 0.3 | 812 | 16 | 3 | 0.4 | 1206 | 23 | 3 | 0.2 |
| 1958 | 5788 | 20 | 0.3 | 301 | 5 | 1 | 0.3 | 561 | 10 | 4 | 0.7 | 810 | 14 | 1 | 0.1 | 1570 | 27 | 5 | 0.3 | 486 | 8 | 1 | 0.2 | 952 | 16 | 0 | 0.0 | 1108 | 19 | 8 | 0.7 |
| 1959 | 6753 | 24 | 0.4 | 331 | 5 | 1 | 0.3 | 596 | 9 | 3 | 0.5 | 926 | 14 | 5 | 0.5 | 1846 | 27 | 6 | 0.3 | 578 | 9 | 0 | 0.0 | 1081 | 16 | 1 | 0.1 | 1395 | 21 | 8 | 0.6 |
| 50-59 | 48164 | 163 | 0.3 | 2673 | 6 | 13 | 0.5 | 5479 | 11 | 24 | 0.4 | 7134 | 15 | 23 | 0.3 | 12000 | 25 | 25 | 0.2 | 2561 | 5 | 5 | 0.2 | 8116 | 17 | 17 | 0.2 | 10201 | 21 | 56 | 0.5 |
| 1960 | 7159 | 26 | 0.4 | 342 | 5 | 0 | 0.0 | 617 | 9 | 6 | 1.0 | 1052 | 15 | 1 | 0.1 | 1993 | 28 | 4 | 0.2 | 468 | 7 | 1 | 0.2 | 1179 | 16 | 4 | 0.3 | 1508 | 21 | 10 | 0.7 |
| 1961 | 8178 | 28 | 0.3 | 457 | 5 | 3 | 0.7 | 650 | 8 | 2 | 0.3 | 1247 | 15 | 1 | 0.1 | 2414 | 30 | 4 | 0.2 | 458 | 6 | 0 | 0.0 | 1401 | 17 | 5 | 0.4 | 1571 | 19 | 13 | 0.8 |
| 1962 | 8909 | 40 | 0.4 | 469 | 5 | 3 | 0.6 | 676 | 8 | 7 | 1.0 | 1286 | 14 | 9 | 0.7 | 2701 | 30 | 10 | 0.4 | 508 | 6 | 0 | 0.0 | 1531 | 17 | 2 | 0.1 | 1738 | 20 | 9 | 0.5 |
| 1963 | 9635 | 32 | 0.3 | 575 | 6 | 4 | 0.7 | 711 | 7 | 2 | 0.3 | 1410 | 15 | 4 | 0.3 | 2816 | 29 | 9 | 0.3 | 603 | 6 | 0 | 0.0 | 1664 | 17 | 0 | 0.0 | 1856 | 19 | 13 | 0.7 |
| 1964 | 10827 | 34 | 0.3 | 658 | 6 | 3 | 0.5 | 762 | 7 | 5 | 0.7 | 1567 | 14 | 6 | 0.4 | 3163 | 29 | 6 | 0.2 | 808 | 7 | 1 | 0.1 | 1886 | 17 | 3 | 0.2 | 1983 | 18 | 10 | 0.5 |
| 1965 | 12056 | 44 | 0.4 | 699 | 6 | 6 | 0.9 | 806 | 7 | 3 | 0.4 | 1686 | 14 | 5 | 0.3 | 3505 | 29 | 7 | 0.2 | 1013 | 8 | 3 | 0.3 | 2036 | 17 | 5 | 0.2 | 2311 | 19 | 15 | 0.6 |
| 1966 | 13678 | 76 | 0.6 | 798 | 6 | 6 | 0.8 | 994 | 7 | 7 | 0.7 | 2007 | 15 | 7 | 0.3 | 3872 | 28 | 22 | 0.6 | 1200 | 9 | 6 | 0.5 | 2154 | 16 | 7 | 0.3 | 2653 | 19 | 21 | 0.8 |
| 1967 | 13885 | 78 | 0.6 | 802 | 6 | 2 | 0.2 | 949 | 7 | 7 | 0.7 | 2019 | 15 | 18 | 0.9 | 3953 | 28 | 11 | 0.3 | 1341 | 10 | 10 | 0.7 | 2176 | 16 | 7 | 0.3 | 2645 | 19 | 23 | 0.9 |
| 1968 | 15188 | 99 | 0.7 | 841 | 6 | 6 | 0.7 | 1156 | 8 | 14 | 1.2 | 2137 | 14 | 14 | 0.7 | 4226 | 28 | 22 | 0.5 | 1512 | 10 | 9 | 0.6 | 2136 | 14 | 6 | 0.3 | 3180 | 21 | 28 | 0.9 |
| 1969 | 15243 | 113 | 0.7 | 835 | 5 | 7 | 0.8 | 1136 | 7 | 9 | 0.8 | 2201 | 14 | 12 | 0.5 | 4033 | 26 | 22 | 0.5 | 1453 | 10 | 8 | 0.6 | 2298 | 15 | 4 | 0.2 | 3287 | 22 | 51 | 1.6 |
| 60-69 | 114758 | 570 | 0.5 | 6456 | 6 | 40 | 0.6 | 8457 | 7 | 62 | 0.7 | 16612 | 14 | 77 | 0.5 | 32676 | 28 | 117 | 0.4 | 9364 | 8 | 38 | 0.4 | 18461 | 16 | 43 | 0.2 | 22732 | 20 | 193 | 0.8 |
| 1970 | 15597 | 172 | 1.1 | 749 | 5 | 3 | 0.4 | 1045 | 7 | 17 | 1.6 | 2242 | 14 | 19 | 0.8 | 4138 | 27 | 29 | 0.7 | 1763 | 11 | 17 | 1.0 | 2298 | 15 | 12 | 0.5 | 3362 | 22 | 75 | 2.2 |
| 1971 | 16347 | 187 | 1.1 | 717 | 4 | 6 | 0.8 | 1100 | 7 | 26 | 2.4 | 2431 | 15 | 28 | 1.2 | 4282 | 26 | 30 | 0.7 | 1921 | 12 | 23 | 1.2 | 2238 | 14 | 5 | 0.2 | 3658 | 22 | 69 | 1.9 |
| 1972 | 16802 | 281 | 1.7 | 687 | 4 | 7 | 1.0 | 1154 | 7 | 28 | 2.4 | 2487 | 15 | 38 | 1.5 | 4209 | 25 | 52 | 1.2 | 1731 | 10 | 25 | 1.4 | 2283 | 14 | 18 | 0.8 | 4251 | 25 | 113 | 2.7 |
| 1973 | 16758 | 288 | 1.7 | 563 | 3 | 2 | 0.4 | 1051 | 6 | 21 | 2.0 | 2629 | 16 | 38 | 1.4 | 3899 | 23 | 49 | 1.3 | 1595 | 10 | 29 | 1.8 | 2142 | 13 | 19 | 0.9 | 4879 | 29 | 130 | 2.7 |
| 1974 | 15393 | 362 | 2.4 | 557 | 4 | 9 | 1.6 | 1045 | 7 | 31 | 3.0 | 2653 | 17 | 49 | 1.8 | 3499 | 23 | 55 | 1.6 | 1734 | 11 | 45 | 2.6 | 1844 | 12 | 21 | 1.1 | 4061 | 26 | 152 | 3.7 |
| 1975 | 15434 | 396 | 2.6 | 477 | 3 | 7 | 1.5 | 990 | 6 | 25 | 2.5 | 2771 | 18 | 74 | 2.7 | 3471 | 22 | 58 | 1.7 | 1687 | 11 | 56 | 3.3 | 1860 | 12 | 15 | 0.8 | 4178 | 27 | 161 | 3.9 |
| 1976 | 16170 | 589 | 3.6 | 479 | 3 | 10 | 2.1 | 1031 | 6 | 29 | 2.8 | 3000 | 19 | 99 | 3.3 | 3774 | 23 | 104 | 2.8 | 1751 | 11 | 81 | 4.6 | 1907 | 12 | 27 | 1.4 | 4228 | 26 | 239 | 5.7 |
| 1977 | 16889 | 733 | 4.3 | 385 | 2 | 8 | 2.1 | 1086 | 6 | 65 | 6.0 | 2969 | 18 | 129 | 4.3 | 3788 | 22 | 134 | 3.5 | 1609 | 10 | 75 | 4.7 | 1953 | 12 | 49 | 2.5 | 5099 | 30 | 273 | 5.4 |
| 1978 | 17015 | 871 | 5.1 | 411 | 2 | 11 | 2.7 | 1237 | 7 | 87 | 7.0 | 2691 | 16 | 132 | 4.9 | 3742 | 22 | 143 | 3.8 | 1722 | 10 | 138 | 8.0 | 1943 | 11 | 57 | 2.9 | 5269 | 31 | 303 | 5.8 |
| 1979 | 16193 | 990 | 6.1 | 372 | 2 | 17 | 4.6 | 1149 | 7 | 114 | 9.9 | 2655 | 16 | 143 | 5.4 | 3596 | 22 | 143 | 4.0 | 1502 | 9 | 128 | 8.5 | 1878 | 12 | 67 | 3.6 | 5041 | 31 | 378 | 7.5 |
| 70-79 | 162598 | 4869 | 3.0 | 5397 | 3 | 80 | 1.5 | 10888 | 7 | 443 | 4.1 | 26528 | 16 | 749 | 2.8 | 38398 | 24 | 797 | 2.1 | 17015 | 10 | 617 | 3.6 | 20346 | 13 | 290 | 1.4 | 44026 | 27 | 1893 | 4.3 |
| 1980 | 16846 | 1190 | 7.1 | 382 | 2 | 9 | 2.4 | 1271 | 8 | 133 | 10.5 | 2683 | 16 | 197 | 7.3 | 3842 | 23 | 184 | 4.8 | 1313 | 8 | 133 | 10.1 | 2060 | 12 | 98 | 4.8 | 5295 | 31 | 436 | 8.2 |
| 1981 | 16386 | 1323 | 8.1 | 408 | 2 | 20 | 4.9 | 1267 | 8 | 163 | 12.9 | 2891 | 18 | 207 | 7.2 | 3901 | 24 | 221 | 5.7 | 1631 | 10 | 166 | 10.2 | 2291 | 14 | 116 | 5.1 | 3997 | 24 | 430 | 10.8 |
| 1982 | 17526 | 1573 | 9.0 | 521 | 3 | 39 | 7.5 | 1285 | 7 | 181 | 14.1 | 2995 | 17 | 270 | 9.0 | 4462 | 25 | 288 | 6.5 | 1656 | 9 | 210 | 12.7 | 2399 | 14 | 139 | 5.8 | 4208 | 24 | 446 | 10.6 |
| 1983 | 18830 | 1746 | 9.3 | 491 | 3 | 37 | 7.5 | 1368 | 7 | 164 | 12.0 | 3074 | 16 | 294 | 9.6 | 4531 | 24 | 293 | 6.5 | 1432 | 8 | 206 | 14.4 | 2511 | 13 | 149 | 5.9 | 5423 | 29 | 603 | 11.1 |
| 1984 | 20094 | 2096 | 10.4 | 562 | 3 | 27 | 4.8 | 1514 | 8 | 196 | 12.8 | 3146 | 16 | 326 | 10.4 | 5078 | 25 | 385 | 7.6 | 1557 | 8 | 278 | 17.9 | 2797 | 14 | 184 | 6.6 | 5440 | 27 | 702 | 12.9 |
| 1985 | 20926 | 2242 | 10.7 | 605 | 3 | 31 | 5.1 | 1544 | 7 | 278 | 18.0 | 3172 | 15 | 337 | 10.6 | 5153 | 25 | 434 | 8.4 | 1462 | 7 | 227 | 15.5 | 3053 | 15 | 204 | 6.7 | 5937 | 28 | 731 | 12.3 |
| 1986 | 21661 | 2493 | 11.5 | 621 | 3 | 43 | 6.9 | 1361 | 6 | 214 | 15.7 | 2926 | 14 | 300 | 10.3 | 5534 | 26 | 556 | 10.0 | 1653 | 8 | 279 | 16.9 | 3075 | 14 | 237 | 7.7 | 6491 | 30 | 864 | 13.3 |
| 80-86 | 132,269 | 12,663 | 9.6 | 3,590 | 3 | 206 | 5.7 | 9,610 | 7 | 1,327 | 13.8 | 20,887 | 16 | 1,931 | 9.2 | 12,501 | 25 | 2,361 | 49 | 10,704 | 8 | 1,499 | 14.0 | 18,186 | 14 | 1,127 | 6.2 | 36,791 | 28 | 4,212 | 11.4 |
| TOTAL | 457,789 | 18,265 | 4.0 | 18,116 | 4 | 339 | 1.9 | 34,434 | 8 | 1,856 | 5.4 | 71,161 | 16 | 2,780 | 3.9 | 115,575 | 25 | 5,300 | 2.9 | 39,644 | 9 | 2,159 | 5.4 | 65,109 | 14 | 1,477 | 2.3 | 113,750 | 25 | 6,354 | 5.6 |

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined by National Science Foundation

## TABLE 7-3 (continued)

### BACHELORS DEGREES IN ENGINEERING BY SUBFIELD AND SEX, 1950-1986

| | | | | Engineering Fields | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Aero/Astro | | | | Chemical | | | | Civil | | | | Electrical | | | | Industrial | | | | Mechanical | | | | Other | | | |
| Year | Total Eng | Women | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W | No. | %E | Wom | %W |
| 1950 | 52046 | 175 | 0.3 | 1712 | 3 | 14 | 0.8 | 4506 | 9 | 32 | 0.7 | 7781 | 15 | 20 | 0.3 | 13270 | 25 | 39 | 0.3 | | | | | 14461 | 28 | 27 | 0.2 | 10536 | 20 | 43 | 0.4 |
| 1951 | 41473 | 87 | 0.2 | 1481 | 4 | 9 | 0.6 | 3307 | 9 | 20 | 0.5 | 7050 | 17 | 7 | 0.1 | 9488 | 23 | 11 | 0.1 | | | | | 10798 | 26 | 15 | 0.1 | 8949 | 22 | 25 | 0.3 |
| 1952 | 30569 | 68 | 0.2 | 911 | 3 | 11 | 1.2 | 2857 | 9 | 8 | 0.3 | 5329 | 17 | 7 | 0.1 | 6453 | 21 | 7 | 0.1 | | | | | 7685 | 25 | 8 | 0 | | | | 0.3 |
| 1953 | 24189 | 53 | 0.2 | 738 | 3 | 4 | 0.5 | 2258 | 9 | 5 | 0.2 | 4396 | 18 | 7 | 0.2 | 4899 | 20 | 7 | 0.1 | | | | | 5964 | 25 | 5 | 0.1 | 5934 | 25 | 9 | 0.2 |
| 1954 | 22529 | 65 | 0.3 | 660 | 3 | 3 | 0.2 | 2042 | 9 | 9 | 0.4 | 3955 | 18 | 7 | 0.2 | 4578 | 21 | 13 | 0.3 | 1742 | 8 | 4 | 0.3 | 5419 | 24 | 9 | 0.2 | 4333 | 19 | 22 | 0.5 |
| 1955 | 22589 | 62 | 0.3 | 684 | 3 | 3 | 0.4 | 2027 | 9 | 11 | 0.6 | 3868 | 17 | 8 | 0.2 | 4860 | 22 | 13 | 0.3 | 1448 | 6 | 4 | 0.3 | 5876 | 26 | 9 | 0.2 | 3824 | 17 | 12 | 0.3 |
| 1956 | 24312 | 76 | 0.3 | 845 | 3 | 2 | 0.2 | 2468 | 9 | 22 | 0.9 | 4227 | 16 | 11 | 0.3 | 6228 | 24 | 11 | 0.2 | 1651 | 6 | 5 | 0.3 | 6728 | 26 | 11 | 0.2 | 4117 | 16 | 14 | 0.3 |
| 1957 | 31211 | 81 | 0.3 | 1109 | 4 | 5 | 0.5 | 2818 | 9 | 22 | 0.8 | 4483 | 15 | 9 | 0.2 | 8108 | 26 | 11 | 0.1 | 1926 | 6 | 7 | 0.4 | 7907 | 25 | 15 | 0.2 | 4660 | 15 | 12 | 0.3 |
| 1958 | 39332 | 109 | 0.3 | 1337 | 3 | 7 | 0.5 | 3008 | 9 | 22 | 0.7 | 5134 | 15 | 11 | 0.3 | 9567 | 27 | 19 | 0.2 | 2108 | 6 | 7 | 0.3 | 9060 | 26 | 19 | 0.2 | 5118 | 14 | 26 | 0.5 |
| 1959 | 38014 | 122 | 0.3 | 1551 | 4 | 6 | 0.4 | 3191 | 8 | 20 | 0.6 | 5594 | 14 | 19 | 0.4 | 10786 | 28 | 30 | 0.3 | 2297 | 6 | 6 | 0.3 | 9542 | 25 | 12 | 0.1 | 5383 | 14 | 28 | 0.5 |
| 50-59 | 324,364 | 873 | 0.3 | 11,080 | 3 | 62 | 0.6 | 28,630 | 9 | 175 | 0.6 | 51,817 | 16 | 108 | 0.2 | 76,237 | 24 | 161 | 0.2 | 10,773 | 3 | 29 | 0.3 | 83,470 | 26 | 330 | 0.2 | 60,168 | 19 | 210 | 0.3 |
| 1960 | 37808 | 145 | 0.4 | 1646 | 4 | 6 | 0.4 | 2966 | 8 | 31 | 1.0 | 5303 | 14 | 15 | 0.3 | 10631 | 28 | 32 | 0.3 | 2242 | 6 | 10 | 0.4 | 9597 | 25 | 20 | 0.2 | 5371 | 14 | 31 | 0.6 |
| 1961 | 35866 | 174 | 0.4 | 1449 | 4 | 5 | 0.3 | 2944 | 8 | 19 | 0.7 | 5185 | 15 | 29 | 0.6 | 10000 | 28 | 25 | 0.2 | 2084 | 6 | 7 | 0.3 | 8651 | 24 | 22 | 0.3 | 5016 | 14 | 31 | 0.6 |
| 1962 | 34729 | 125 | 0.4 | 1440 | 4 | 5 | 0.3 | 2677 | 8 | 20 | 0.7 | 5235 | 15 | 23 | 0.4 | 10241 | 30 | 34 | 0.3 | 1904 | 5 | 8 | 0.4 | 8473 | 24 | 15 | 0.2 | 4741 | 14 | 22 | 0.5 |
| 1963 | 35456 | 133 | 0.4 | 1292 | 4 | 4 | 0.3 | 2724 | 8 | 16 | 1.0 | 4854 | 15 | 18 | 0.4 | 10591 | 32 | 31 | 0.3 | 1861 | 6 | 10 | 0.5 | 7697 | 23 | 25 | 0.3 | 4637 | 14 | 18 | 0.4 |
| 1964 | 34926 | 159 | 0.5 | 1455 | 4 | 7 | 0.5 | 2995 | 9 | 26 | 0.9 | 5077 | 14 | 26 | 0.5 | 11241 | 32 | 37 | 0.3 | 2194 | 6 | 8 | 0.4 | 7697 | 22 | 17 | 0.2 | 4544 | 13 | 42 | 0.9 |
| 1965 | 36799 | 159 | 0.4 | 1733 | 5 | 8 | 0.5 | 3076 | 8 | 24 | 0.8 | 5002 | 14 | 33 | 0.7 | 12730 | 35 | 36 | 0.3 | 2226 | 6 | 6 | 0.3 | 8035 | 22 | 16 | 0.2 | 4801 | 13 | 34 | 0.7 |
| 1966 | 38815 | 145 | 0.4 | 1668 | 4 | 6 | 0.4 | 3849 | 8 | 33 | 0.8 | 5335 | 15 | 19 | 0.4 | 11807 | 31 | 29 | 0.3 | 2375 | 7 | 10 | 0.4 | 7811 | 20 | 19 | 0.2 | 4794 | 13 | 41 | 0.9 |
| 1967 | 41188 | 182 | 0.5 | 1916 | 5 | 11 | 0.7 | 3969 | 8 | 28 | 1.0 | 5147 | 14 | 23 | 0.4 | 12847 | 30 | 42 | 0.4 | 2744 | 7 | 9 | 0.4 | 7890 | 20 | 20 | 0.3 | 5359 | 14 | 48 | 0.9 |
| 1968 | 37614 | 221 | 0.6 | 2070 | 6 | 12 | 0.6 | 3211 | 9 | 30 | 0.9 | 5608 | 15 | 28 | 0.5 | 10725 | 29 | 45 | 0.4 | 2727 | 7 | 14 | 0.5 | 7402 | 20 | 32 | 0.4 | 5441 | 14 | 51 | 0.9 |
| 1969 | 41552 | 317 | 0.8 | 2625 | 6 | 19 | 0.7 | 3587 | 9 | 55 | 1.5 | 6001 | 14 | 43 | 0.7 | 11695 | 28 | 66 | 0.6 | 3002 | 7 | 16 | 0.5 | 8514 | 20 | 40 | 0.5 | 6161 | 15 | 76 | 1.2 |
| 60-69 | 565,168 | 1,699 | 0.3 | 23,942 | 5 | 85 | 0.4 | 29,791 | 5 | 284 | 1.0 | 53,245 | 15 | 231 | 0.4 | 128,148 | 30 | 471 | 0.3 | 22,949 | 4 | 99 | 0.4 | 82,295 | 23 | 229 | 0.3 | 50,669 | 14 | 394 | 0.8 |
| 1970 | 44772 | 338 | 0.8 | 2794 | 6 | 20 | 0.7 | 3720 | 8 | 47 | 1.3 | 6524 | 15 | 47 | 0.7 | 12288 | 27 | 48 | 0.4 | 3149 | 7 | 21 | 0.7 | 9310 | 21 | 59 | 0.6 | 6975 | 16 | 86 | 1.2 |
| 1971 | 45587 | 345 | 0.8 | 2443 | 5 | 17 | 0.7 | 3615 | 8 | 65 | 1.8 | 6623 | 15 | 54 | 0.8 | 12288 | 27 | 76 | 0.6 | 3310 | 7 | 20 | 0.6 | 8917 | 20 | 41 | 0.5 | 8101 | 18 | 94 | 1.1 |
| 1972 | 46003 | 501 | 1.1 | 2186 | 5 | 20 | 0.9 | 3663 | 8 | 76 | 2.1 | 6909 | 15 | 69 | 1.0 | 12181 | 26 | 82 | 0.7 | 3715 | 8 | 47 | 1.3 | 9574 | 19 | 65 | 0.6 | 8783 | 19 | 168 | 1.9 |
| 1973 | 44389 | 580 | 1.3 | 1778 | 4 | 18 | 1.0 | 3636 | 8 | 90 | 2.5 | 7002 | 16 | 78 | 1.0 | 12377 | 28 | 158 | 1.3 | 3508 | 7 | 31 | 0.9 | 8584 | 18 | 61 | 0.7 | 9644 | 21 | 144 | 1.5 |
| 1974 | 43930 | 704 | 1.6 | 1210 | 3 | 18 | 1.5 | 3454 | 8 | 117 | 3.4 | 8145 | 19 | 129 | 1.6 | 11419 | 26 | 217 | 1.9 | 2921 | 7 | 44 | 1.5 | 7737 | 18 | 65 | 0.8 | 8644 | 20 | 218 | 2.5 |
| 1975 | 40065 | 860 | 2.1 | 1174 | 3 | 24 | 2.0 | 3142 | 8 | 141 | 4.5 | 7790 | 19 | 150 | 1.9 | 10264 | 26 | 270 | 2.6 | 2585 | 6 | 49 | 1.9 | 6749 | 17 | 82 | 1.2 | 8181 | 20 | 274 | 3.3 |
| 1976 | 39114 | 1447 | 3.7 | 1099 | 3 | 34 | 3.1 | 3101 | 8 | 276 | 8.9 | 8059 | 21 | 252 | 3.1 | 9874 | 25 | 541 | 5.5 | 2241 | 6 | 87 | 3.9 | 6841 | 17 | 147 | 2.1 | 7987 | 20 | 459 | 5.8 |
| 1977 | 41561 | 2084 | 5.0 | 1078 | 3 | 38 | 3.5 | 3581 | 9 | 429 | 12.0 | 8374 | 20 | 433 | 5.2 | 10018 | 24 | 768 | 7.7 | 2264 | 5 | 149 | 6.6 | 7771 | 19 | 254 | 3.3 | 8475 | 20 | 543 | 6.4 |
| 1978 | 47411 | 3497 | 7.4 | 1169 | 2 | 43 | 3.7 | 4615 | 10 | 716 | 15.5 | 9045 | 20 | 690 | 7.6 | 11203 | 24 | 835 | 7.5 | 2712 | 6 | 223 | 8.2 | 8904 | 19 | 466 | 5.2 | 9496 | 20 | 806 | 8.5 |
| 1979 | 55720 | 4959 | 9.2 | 1386 | 2 | 66 | 4.8 | 5655 | 11 | 1006 | 17.8 | 9961 | 19 | 995 | 9.6 | 12640 | 23 | 659 | 5.2 | 2804 | 5 | 428 | 15.3 | 10171 | 19 | 603 | 5.9 | 11323 | 21 | 1202 | 10.6 |
| 70-79 | 468,572 | 25,295 | 5.4 | 16,160 | 4 | 322 | 1.9 | 38,284 | 9 | 2,971 | 7.8 | 74,124 | 18 | 2,855 | 3.8 | 134,344 | 29 | 3,186 | 1.9 | 39,159 | 8 | 1,202 | 3.1 | 85,778 | 19 | 1,786 | 2.1 | 87,727 | 20 | 3,994 | 4.6 |
| 1980 | 59,420 | 6016 | 10.1 | 1414 | 2 | 82 | 5.8 | 4783 | 11 | 1215 | 19.8 | 10442 | 18 | 991 | 9.5 | 13902 | 23 | 902 | 6.5 | 3217 | 5 | 545 | 16.9 | 11663 | 20 | 862 | 7.4 | 12009 | 20 | 1397 | 11.6 |
| 1981 | 60387 | 7704 | 11.1 | 1809 | 3 | 129 | 7.1 | 4527 | 10 | 1252 | 19.2 | 10678 | 17 | 1221 | 10.0 | 14938 | 24 | 1094 | 7.3 | 3833 | 6 | 784 | 19.7 | 13229 | 21 | 1176 | 8.5 | 12373 | 19 | 1534 | 12.6 |
| 1982 | 67021 | 8211 | 12.3 | 2120 | 3 | 171 | 8.1 | 4740 | 10 | 1447 | 21.8 | 10504 | 16 | 1141 | 11.3 | 16455 | 25 | 1409 | 8.6 | 3992 | 6 | 943 | 23.6 | 13922 | 21 | 1220 | 8.8 | 13268 | 20 | 1830 | 13.8 |
| 1983 | 72248 | 9600 | 13.3 | 2137 | 3 | 172 | 8.1 | 5245 | 10 | 2616 | 22.5 | 9989 | 14 | 1323 | 13.2 | 18049 | 25 | 1774 | 9.8 | 4749 | 7 | 981 | 24.2 | 15635 | 22 | 1443 | 9.2 | 15475 | 21 | 2294 | 14.8 |
| 1984 | 75292 | 10668 | 14.2 | 2516 | 3 | 175 | 6.9 | 5475 | 10 | 1871 | 25.0 | 9695 | 13 | 1703 | 15.4 | 19943 | 26 | 2024 | 10.2 | 5037 | 7 | 1054 | 26.8 | 16629 | 22 | 1761 | 10.6 | 15521 | 20 | 2480 | 16.0 |
| 1985 | 77054 | 11295 | 14.7 | 2954 | 4 | 242 | 8.4 | 5146 | 9 | 1857 | 26.0 | 9160 | 12 | 1720 | 17.4 | 21691 | 28 | 2416 | 11.1 | 5416 | 7 | 1148 | 29.3 | 16794 | 22 | 1749 | 10.4 | 15593 | 20 | 2553 | 16.4 |
| 1986 | 76553 | 11749 | 14.9 | 2907 | 4 | 248 | 8.9 | 5877 | 9 | 1932 | 24.7 | 8679 | 11 | 1641 | 17.1 | 22742 | 30 | 2836 | 11.9 | 4162 | 5 | 1240 | 30.3 | 16294 | 21 | 1669 | 10.7 | 16777 | 19 | 2443 | 16.5 |
| 80-86 | 491,015 | 66,782 | 10.7 | 15,770 | 3 | 1,228 | 7.5 | 47,103 | 10 | 10,770 | 22.4 | 66,160 | 14 | 8,049 | 10.0 | 128,720 | 26 | 12,457 | 9.7 | 24,803 | 5 | 6,687 | 24.9 | 104,426 | 21 | 9,660 | 9.4 | 98,816 | 20 | [illegible] | 14.9 |
| TOTAL | 1,629,004 | 81,634 | 4.5 | 68,502 | 4 | 1,666 | 2.5 | 144,227 | 9 | 14,198 | 9.0 | 255,193 | 16 | 12,435 | 4.5 | 435,049 | 26 | 15,175 | 3.5 | 89,679 | 6 | 8,017 | 8.9 | 355,949 | 22 | 11,998 | 3.4 | 297,380 | [illegible] | [illegible] | 6.4 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees, 1969 through 1986 Series, Engineering Manpower Commission

TABLE 7-4

ENGINEERING DEGREEES GRANTED TO WOMEN BY DEGREE LEVEL, 1968-69 THROUGH 1985-86

| YEAR | BACHELOR'S | | | MASTER'S+ | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| 1968-69* | 39,972 | 328 | 0.82 | 14,980 | 107 | 0.71 | 3,387 | 23 | 0.68 |
| 1969-70* | 42,966 | 358 | 0.83 | 15,548 | 170 | 1.09 | 3,620 | 16 | 0.44 |
| 1970-71* | 43,167 | 353 | 0.82 | 16,383 | 158 | 0.96 | 3,640 | 25 | 0.69 |
| 1971-72 | 44,190 | 525 | 1.19 | 17,356 | 299 | 1.76 | 3,774 | 35 | 0.93 |
| 1972-73 | 43,429 | 624 | 1.44 | 17,152 | 226 | 1.32 | 3,587 | 48 | 1.34 |
| 1973-74 | 41,407 | 744 | 1.80 | 15,885 | 393 | 2.47 | 3,362 | 36 | 1.07 |
| 1974-75 | 38,210 | 878 | 2.30 | 15,773 | 380 | 2.41 | 3,039 | 53 | 1.74 |
| 1975-76 | 37,970 | 1,376 | 3.62 | 16,506 | 557 | 3.37 | 2,977 | 56 | 1.88 |
| 1976-77 | 40,095 | 1,961 | 4.89 | 16,551 | 646 | 3.90 | 2,814 | 67 | 2.38 |
| 1977-78 | 46,095 | 3,280 | 7.11 | 16,182 | 814 | 5.03 | 2,573 | 51 | 1.98 |
| 1978-79 | 52,598 | 4,716 | 8.97 | 15,624 | 866 | 5.54 | 2,815 | 61 | 2.17 |
| 1979-80 | 58,742 | 5,680 | 9.67 | 17,243 | 1,092 | 6.33 | 2,751 | 88 | 3.20 |
| 1980-81 | 62,935 | 6,545 | 10.40 | 17,914 | 1,225 | 6.84 | 2,841 | 90 | 3.17 |
| 1981-82 | 66,990 | 8,140 | 12.15 | 18,289 | 1,539 | 8.41 | 2,887 | 126 | 4.36 |
| 1982-83 | 72,471 | 9,566 | 13.20 | 19,909 | 1,796 | 9.02 | 3,023 | 142 | 4.70 |
| 1983-84 | 76,931 | 10,761 | 13.99 | 21,226 | 2,146 | 10.12 | 3,234 | 153 | 4.73 |
| 1984-85 | 77,892 | 11,516 | 14.79 | 22,502 | 2,538 | 11.28 | 3,383 | 192 | 5.67 |
| 1985-86 | 78,178 | 11,264 | 14.41 | 23,025 | 2,745 | 11.92 | 3,686 | 246 | 6.67 |

+Includes Engineer Degrees

*Totals for women in these years include only numbers actually reported. The totals would be higher if all institutions had reported all categories. From 1971-72 through 1984-85, estimates are included for schools that did not report. Beginning in 1985-86, no estimates were added for the few missing schools.

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1974 through 1986, Engineering Manpower Commission

## TABLE 7-5

ENGINEERING DEGREES BY LEVEL, SEX, RACE & CITIZENSHIP, 1985 AND 1986

| | BACHELOR'S | | MASTER'S* | | Ph.D. | |
|---|---|---|---|---|---|---|
| | 1985 | 1986 | 1985 | 1986 | 1985 | 1986 |
| **Total** | **77,892** | **78,178** | **22,502** | **23,025** | **3,383** | **3,686** |
| Women | 11,516 | 11,264 | 2,538 | 2,745 | 192 | 246 |
| Black | 2,045 | 2,114 | 311 | 345 | 32 | 17 |
| Hispanic° | 2,095 | 2,227 | 371 | 331 | 34 | 38 |
| Asian/Pacific | 4,302 | 4,826 | 1,529 | 1,712 | 246 | 229 |
| American Indian | 109 | 129 | 28 | 27 | 4 | 4 |
| Foreign National | 5,958 | 6,275 | 6,115 | 5,735 | 1,400 | 1,441 |

*Includes Engineer Degrees °Includes 363 B.S. and 9 M.S. each year at U. Puerto Rico

## TABLE 7-6

PERCENT OF ENGINEERING BACHELOR'S DEGREES AWARDED TO WOMEN AND MINORITIES

| | 1974 | 1976 | 1978 | 1980 | 1982 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|
| Women | 1.80 | 3.62 | 7.11 | 9.67 | 12.15 | 13.99 | 14.79 | 14.41 |
| Black | 1.83 | 2.05 | 1.94 | 2.25 | 2.45 | 2.63 | 2.63 | 2.70 |
| Hispanics° | 1.56 | 1.81 | 1.91 | 1.72 | 1.91 | 2.20 | 2.23 | 2.41 |
| Asian/Pacific | 2.31 | 2.83 | 2.59 | 3.27 | 3.85 | 4.69 | 5.52 | 6.17 |
| American Indian | 0.08 | 0.11 | 0.08 | 0.10 | 0.14 | 0.15 | 0.14 | 0.17 |
| Foreign National | 5.88 | 7.37 | 6.69 | 8.33 | 8.08 | 7.58 | 7.65 | 8.03 |

°Exclusive of the University of Puerto Rico

## TABLE 7-7

PERCENT OF ENGINEERING DEGREES AWARDED TO FOREIGN NATIONALS

| | B.S | M.S. | Ph.D |
|---|---|---|---|
| 1974 | 5.88 | 19.,51 | 30.16 |
| 1975 | 6.45 | 20.61 | 29.32 |
| 1976 | 7.37 | 22.36 | 35.61 |
| 1977 | 7.47 | 23.11 | 35.36 |
| 1978 | 6.69 | 22.99 | 33.97 |
| 1979 | 7.20 | 25.24 | 33.00 |
| 1980 | 8.33 | 26.17 | 35.70 |
| 1981 | 8.93 | 26.11 | 37.10 |
| 1982 | 8.08 | 28.50 | 40.42 |
| 1983 | 8.49 | 25.84 | 39.43 |
| 1984 | 7.58 | 26.99 | 38.75 |
| 1985 | 7.65 | 27.18 | 41.38 |
| 1986 | 8.03 | 24.91 | 39.09 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-8

ENGINEERING DOCTORAL DEGREES BY SEX, RACE/ETHNICITY AND CURRICULUM, 1984-1986

| CURRICULUM | TOTAL | | | WOMEN | | | BLACKS | | | HISPANICS | | | ASIAN/PACIFIC | | | AMERICAN INDIANS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
| Aerospace & Related | 131 | 112 | 114 | 2 | 3 | 3 | 0 | 1 | 0 | 0 | 1 | 1 | 7 | 4 | 3 | 0 | 0 | 2 |
| Agricultural | 69 | 57 | 60 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| Architectural | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bioengineering | 49 | 55 | 46 | 7 | 8 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 3 | 3 | 0 | 0 | 0 |
| Ceramics | 18 | 14 | 14 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| Chemical | 380 | 461 | 534 | 19 | 36 | 54 | 3 | 5 | 1 | 3 | 4 | 8 | 38 | 31 | 53 | 0 | 0 | 0 |
| Civil & Construction | 402 | 400 | 439 | 21 | 17 | 22 | 1 | 3 | 1 | 1 | 5 | 5 | 40 | 20 | 17 | 0 | 1 | 0 |
| Computer | 131 | 127 | 176 | 10 | 7 | 21 | 2 | 1 | 1 | 1 | 1 | 1 | 9 | 13 | 8 | 0 | 0 | 0 |
| Electrical & Electronic | 693 | 714 | 779 | 15 | 25 | 41 | 2 | 9 | 5 | 8 | 5 | 11 | 74 | 62 | 53 | 0 | 1 | 0 |
| Engineering Science | 151 | 156 | 182 | 6 | 15 | 15 | 2 | 0 | 1 | 1 | 3 | 2 | 5 | 10 | 8 | 0 | 0 | 0 |
| Environmental | 79 | 52 | 42 | 7 | 2 | 2 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 0 | 1 | 0 |
| General Engineering | 55 | 51 | 57 | 3 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 3 | 10 | 8 | 0 | 0 | 0 |
| Industrial | 124 | 117 | 120 | 13 | 11 | 15 | 1 | 1 | 2 | 1 | 1 | 0 | 11 | 4 | 12 | 0 | 0 | 0 |
| Marine | 21 | 29 | 21 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Mechanical | 476 | 540 | 565 | 13 | 24 | 16 | 4 | 4 | 1 | 5 | 4 | 5 | 34 | 41 | 26 | 0 | 1 | 1 |
| Mining/Mineral/Geological | 33 | 45 | 59 | 2 | 4 | 12 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Materials & Metallurgical | 241 | 272 | 272 | 22 | 23 | 23 | 6 | 2 | 0 | 2 | 5 | 0 | 24 | 28 | 22 | 0 | 0 | 1 |
| Nuclear | 115 | 98 | 112 | 6 | 3 | 6 | 0 | 2 | 3 | 1 | 1 | 3 | 3 | 4 | 4 | 0 | 0 | 0 |
| Petroleum & Nat Gas | 11 | 14 | 18 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Systems | 49 | 64 | 61 | 1 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 0 | 0 | 0 |
| Others | 6 | 2 | 15 | 1 | 7 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 0 | 0 |
| TOTAL | 3234 | 3383 | 3686 | 153 | 192 | 246 | 24 | 32 | 17 | 25 | 34 | 38 | 267 | 246 | 229 | 0 | 4 | 4 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-8 (continued)

ENGINEERING MASTERS* DEGREES BY SEX, RACE/ETHNICITY AND CURRICULUM, 1984-1986

| CURRICULUM | TOTAL | | | WOMEN | | | BLACKS | | | HISPANICS | | | ASIAN/PACIFIC | | | AMERICAN INDIANS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
| Aerospace & Related | 553 | 644 | 652 | 30 | 29 | 41 | 3 | 5 | 7 | 8 | 18 | 7 | 14 | 30 | 35 | 0 | 0 | 2 |
| Agricultural | 189 | 224 | 171 | 15 | 17 | 15 | 0 | 1 | 1 | 3 | 3 | 1 | 1 | 1 | 2 | 0 | 0 | 0 |
| Architectural | 35 | 73 | 48 | 2 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 2 | 1 | 0 | 0 |
| Bioengineering | 211 | 272 | 233 | 47 | 40 | 63 | 2 | 7 | 2 | 1 | 1 | 5 | 6 | 14 | 16 | 0 | 0 | 0 |
| Ceramics | 87 | 75 | 79 | 16 | 16 | 13 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 7 | 0 | 0 | 0 |
| Chemical | 1570 | 1618 | 1430 | 193 | 258 | 237 | 18 | 20 | 24 | 25 | 35 | 27 | 127 | 114 | 99 | 1 | 1 | 2 |
| Civil & Construction | 3351 | 3416 | 3197 | 320 | 337 | 330 | 32 | 45 | 46 | 56 | 43 | 39 | 207 | 160 | 186 | 3 | 2 | 4 |
| Computer | 1533 | 2232 | 2243 | 271 | 476 | 473 | 19 | 44 | 37 | 23 | 29 | 25 | 124 | 242 | 231 | 1 | 1 | 2 |
| Electrical & Electronic | 5393 | 5592 | 5926 | 362 | 452 | 547 | 76 | 81 | 99 | 114 | 106 | 94 | 395 | 436 | 557 | 12 | 15 | 9 |
| Engineering Science | 434 | 459 | 641 | 54 | 62 | 87 | 5 | 5 | 7 | 3 | 6 | 6 | 21 | 31 | 38 | 0 | 0 | 0 |
| Environmental | 424 | 382 | 351 | 98 | 83 | 80 | 3 | 3 | 3 | 7 | 4 | 2 | 15 | 16 | 15 | 0 | 0 | 0 |
| General Engineering | 887 | 748 | 513 | 97 | 77 | 44 | 14 | 14 | 6 | 22 | 24 | 11 | 79 | 69 | 75 | 0 | 1 | 2 |
| Industrial | 1262 | 1415 | 1798 | 203 | 222 | 269 | 32 | 24 | 35 | 38 | 30 | 42 | 72 | 84 | 83 | 2 | 1 | 2 |
| Marine | 186 | 163 | 197 | 10 | 7 | 7 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 0 | 3 | 0 | 0 | 0 |
| Materials & Metallurgical | 583 | 622 | 658 | 83 | 80 | 89 | 12 | 5 | 5 | 7 | 10 | 2 | 46 | 39 | 58 | 0 | 1 | 1 |
| Mechanical | 3160 | 3315 | 3462 | 181 | 209 | 247 | 31 | 41 | 49 | 32 | 41 | 39 | 186 | 229 | 237 | 3 | 3 | 1 |
| Mining/Mineral/Geological | 242 | 256 | 256 | 34 | 31 | 37 | 0 | 1 | 3 | 3 | 1 | 2 | 3 | 4 | 4 | 1 | 0 | 0 |
| Nuclear | 282 | 268 | 284 | 11 | 16 | 20 | 2 | 1 | 1 | 11 | 2 | 16 | 13 | 10 | 9 | 1 | 1 | 0 |
| Petroleum & Nat Gas | 260 | 240 | 249 | 15 | 16 | 22 | 1 | 5 | 3 | 4 | 2 | 3 | 12 | 17 | 15 | 0 | 1 | 1 |
| Systems | 479 | 380 | 499 | 83 | 37 | 84 | 6 | 1 | 14 | 7 | 1 | 5 | 28 | 9 | 37 | 0 | 1 | 1 |
| Others | 105 | 108 | 138 | 24 | 77 | 28 | 1 | 8 | 3 | 0 | 7 | 1 | 1 | 22 | 3 | 0 | 0 | 0 |
| TOTAL | 21226 | 22502 | 23025 | 2149 | 2546 | 2737 | 257 | 311 | 345 | 364 | 371 | 331 | 1354 | 1529 | 1712 | 25 | 28 | 27 |

* Includes Professional Degrees in Engineering.

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-8 (continued)

ENGINEERING BACHELORS DEGREES BY SEX, RACE/ETHNICITY AND CURRICULUM, 1984-1986

| CURRICULUM | TOTAL | | | WOMEN | | | BLACKS | | | HISPANICS | | | ASIAN/PACIFIC | | | AMERICAN INDIANS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
| Aerospace & Related | 2364 | 2663 | 2747 | 169 | 219 | 239 | 73 | 41 | 46 | 44 | 56 | 72 | 55 | 93 | 104 | 6 | 1 | 8 |
| Agricultural | 655 | 598 | 638 | 61 | 57 | 60 | 4 | 2 | 3 | 16 | 6 | 10 | 6 | 4 | 6 | 2 | 0 | 0 |
| Architectural | 341 | 472 | 381 | 49 | 75 | 75 | 25 | 37 | 34 | 14 | 16 | 13 | 15 | 5 | 13 | 1 | 0 | 0 |
| Bioengineering | 611 | 607 | 618 | 154 | 174 | 217 | 13 | 14 | 9 | 15 | 11 | 25 | 17 | 44 | 59 | 0 | 0 | 1 |
| Ceramics | 361 | 283 | 247 | 81 | 66 | 65 | 1 | 9 | 8 | 6 | 1 | 2 | 15 | 9 | 6 | 0 | 0 | 0 |
| Chemical | 7685 | 7324 | 6148 | 1829 | 1886 | 1483 | 250 | 221 | 194 | 182 | 222 | 179 | 376 | 341 | 296 | 9 | 12 | 13 |
| Civil & Construction | 9877 | 9468 | 8798 | 1295 | 1214 | 1091 | 197 | 188 | 168 | 287 | 249 | 282 | 356 | 343 | 351 | 14 | 16 | 14 |
| Computer | 3499 | 4248 | 4999 | 800 | 945 | 1045 | 83 | 102 | 91 | 66 | 91 | 132 | 289 | 393 | 482 | 2 | 4 | 10 |
| Electrical & Electronic | 20495 | 22055 | 24514 | 1996 | 2386 | 2755 | 626 | 720 | 806 | 642 | 684 | 721 | 1320 | 1866 | 2337 | 19 | 25 | 44 |
| Engineering Science | 2349 | 1445 | 1190 | 302 | 226 | 197 | 79 | 21 | 24 | 51 | 19 | 28 | 80 | 45 | 56 | 5 | 0 | 2 |
| Environmental | 301 | 224 | 182 | 67 | 56 | 36 | 5 | 2 | 1 | 1 | 4 | 3 | 3 | 3 | 2 | 0 | 3 | 3 |
| General Engineering | 2037 | 1664 | 1385 | 373 | 268 | 260 | 58 | 44 | 53 | 67 | 63 | 47 | 238 | 147 | 106 | 6 | 0 | 1 |
| Industrial | 3923 | 4321 | 4645 | 1065 | 1219 | 1266 | 176 | 159 | 168 | 184 | 172 | 228 | 136 | 168 | 179 | 4 | 6 | 7 |
| Marine | 739 | 736 | 602 | 43 | 46 | 34 | 3 | 5 | 7 | 10 | 3 | 11 | 5 | 7 | 10 | 1 | 1 | 1 |
| Materials & Metallurgical | 1011 | 988 | 1011 | 239 | 233 | 237 | 18 | 25 | 22 | 27 | 21 | 23 | 27 | 43 | 56 | 2 | 4 | 1 |
| Mechanical | 17214 | 17152 | 16706 | 1792 | 1812 | 1727 | 373 | 401 | 430 | 364 | 409 | 385 | 618 | 691 | 670 | 34 | 29 | 21 |
| Mining/Mineral/Geological | 978 | 926 | 769 | 136 | 132 | 104 | 3 | 4 | 3 | 6 | 6 | 8 | 10 | 4 | 9 | 6 | 4 | 1 |
| Nuclear | 434 | 429 | 400 | 40 | 50 | 48 | 4 | 5 | 6 | 12 | 8 | 9 | 11 | 11 | 14 | 0 | 1 | 0 |
| Petroleum & Nat Gas | 1587 | 1550 | 1381 | 170 | 182 | 133 | 17 | 8 | 13 | 35 | 37 | 35 | 22 | 32 | 24 | 0 | 2 | 1 |
| Systems | 222 | 442 | 594 | 47 | 81 | 160 | 11 | 22 | 24 | 7 | 11 | 9 | 7 | 15 | 23 | 0 | 0 | 1 |
| Others | 248 | 297 | 223 | 53 | 166 | 32 | 3 | 13 | 4 | 2 | 5 | 5 | 3 | 12 | 2 | 1 | 1 | 0 |
| TOTAL | 76683 | 77892 | 78178 | 10761 | 11493 | 11264 | 2022 | 2043 | 2114 | 2038 | 2094 | 2227 | 3609 | 4276 | 4805 | 112 | 109 | 129 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1975 through 1985, Engineering Manpower Commission

## TABLE 7-9

BACHELOR'S DEGREES IN **CHEMICAL ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | CHEM ENG. | WOMEN | | BLACKS | | HISPANICS | | ASIAN | | AM. INDIAN | | FOREIGN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1975 | 38,210 | 3,167 | 131 | 4.1 | 40 | 1.3 | 37 | 1.2 | 74 | 2.3 | 0 | 0.0 | * | * |
| 1976 | 37,970 | 3,146 | 239 | 7.6 | 54 | 1.7 | 22 | 0.7 | 72 | 2.3 | 2 | 0.1 | 267 | 8.5 |
| 1977 | 40,095 | 3,593 | 403 | 11.2 | 52 | 1.5 | 37 | 1.0 | 113 | 3.2 | 2 | 0.1 | 288 | 8.0 |
| 1978 | 46,091 | 4,621 | 676 | 14.6 | 86 | 1.9 | 58 | 1.3 | 139 | 3.0 | 4 | 0.1 | 291 | 6.3 |
| 1979 | 52,598 | 5,837 | 978 | 16.8 | 107 | 1.8 | 40 | 0.7 | 210 | 3.6 | 5 | 0.1 | 361 | 6.2 |
| 1980 | 58,742 | 6,555 | 1,130 | 17.2 | 137 | 2.1 | 87 | 1.3 | 239 | 3.7 | 11 | 0.2 | 353 | 5.4 |
| 1981 | 62,935 | 6,863 | 1,162 | 16.9 | 166 | 2.4 | 179 | 2.6 | 234 | 3.4 | 17 | 0.3 | 429 | 6.3 |
| 1982 | 66,990 | 7,039 | 1,448 | 20.6 | 182 | 2.6 | 111 | 1.6 | 258 | 3.7 | 10 | 0.1 | 311 | 4.4 |
| 1983 | 72,471 | 7,499 | 1,703 | 22.7 | 207 | 2.8 | 195 | 2.6 | 309 | 4.1 | 9 | 0.1 | 379 | 5.1 |
| 1984 | 76,931 | 7,685 | 1,829 | 23.8 | 250 | 3.3 | 113 | 1.5 | 376 | 4.9 | 9 | 0.1 | 328 | 4.3 |
| 1985 | 77,892 | 7,324 | 1,886 | 25.8 | 221 | 3.0 | 145 | 2.0 | 341 | 4.7 | 12 | 0.2 | 330 | 4.5 |
| TOTAL | 630,925 | 63,329 | 11,585 | 18.3 | 1,502 | 2.4 | 1,024 | 1.6 | 2,365 | 3.7 | 81 | 0.1 | 3,337 | 5.6° |

Percents are of Chemical Engineers *Not Available °Total and Percent based on 1976-1985

## TABLE 7-9 (continued)

BACHELOR'S DEGREES IN **CIVIL ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | CIVIL ENG. | WOMEN | | BLACKS | | HISPANICS | | ASIAN | | AM. INDIAN | | FOREIGN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1975 | 38,210 | 7,957 | 154 | 1.9 | 94 | 1.2 | 147 | 1.9 | 196 | 2.5 | 9 | 0.1 | * | * |
| 1976 | 37,970 | 7,947 | 220 | 2.8 | 87 | 1.1 | 126 | 1.6 | 182 | 2.3 | 13 | 0.2 | 471 | 5.9 |
| 1977 | 40,095 | 8,248 | 398 | 4.8 | 109 | 1.3 | 122 | 1.5 | 251 | 3.0 | 11 | 0.1 | 563 | 6.8 |
| 1978 | 46,091 | 9,168 | 633 | 6.9 | 118 | 1.3 | 169 | 1.8 | 209 | 2.3 | 5 | 0.1 | 728 | 7.9 |
| 1979 | 52,598 | 10,030 | 948 | 9.5 | 152 | 1.5 | 149 | 1.5 | 303 | 3.0 | 11 | 0.1 | 890 | 8.9 |
| 1980 | 58,742 | 10,191 | 931 | 9.1 | 158 | 1.6 | 168 | 1.7 | 290 | 2.9 | 9 | 0.1 | 1,309 | 12.8 |
| 1981 | 62,935 | 10,547 | 1,065 | 10.1 | 176 | 1.7 | 265 | 2.5 | 323 | 3.1 | 17 | 0.2 | 1,455 | 13.8 |
| 1982 | 66,990 | 10,330 | 1,144 | 11.1 | 176 | 1.7 | 181 | 1.8 | 309 | 3.0 | 14 | 0.1 | 1,456 | 14.1 |
| 1983 | 72,471 | 10,484 | 1,315 | 12.5 | 213 | 2.0 | 300 | 2.9 | 369 | 3.5 | 12 | 0.1 | 1,619 | 15.4 |
| 1984 | 76,931 | 9,877 | 1,295 | 13.1 | 197 | 2.0 | 254 | 2.6 | 356 | 3.6 | 14 | 0.1 | 1,452 | 14.7 |
| 1985 | 77,892 | 9,468 | 1,214 | 12.8 | 188 | 2.0 | 222 | 2.3 | 343 | 3.6 | 16 | 0.2 | 1,509 | 15.9 |
| TOTAL | 630,925 | 104,247 | 9,317 | 8.9 | 1,668 | 1.6 | 2,103 | 2.0 | 3,131 | 3.0 | 131 | 0.1 | 11,452° | 11.9° |

Percents are of Civil Engineers *Not Available °Total and Percent based on 1976-1985

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1975 through 1985, Engineering Manpower Commission

## TABLE 7-9 (continued)

BACHELOR'S DEGREES IN **COMPUTER ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | COMP ENG. | WOMEN | | BLACKS | | HISPANICS | | ASIAN | | AM. INDIAN | | FOREIGN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1975 | 38,210 | 599 | 54 | 9.0 | 9 | 1.5 | 6 | 1.0 | 10 | 1.7 | 1 | - | * | * |
| 1976 | 37,970 | 796 | 79 | 9.9 | 24 | 3.0 | 5 | 0.6 | 25 | 3.1 | 2 | 0.2 | 37 | 4.7 |
| 1977 | 40,095 | 1,280 | 117 | 9.1 | 40 | 3.1 | 11 | 0.9 | 111 | 8.7 | 3 | 0.2 | 82 | 6.4 |
| 1978 | 46,091 | 1,546 | 193 | 12.5 | 39 | 2.5 | 23 | 1.5 | 140 | 9.1 | 1 | 0.1 | 93 | 6.0 |
| 1979 | 52,598 | 1,510 | 206 | 13.6 | 22 | 1.5 | 23 | 1.5 | 93 | 6.2 | 0 | 0.0 | 77 | 5.1 |
| 1980 | 58,742 | 1,816 | 260 | 14.3 | 34 | 1.9 | 32 | 1.8 | 180 | 9.9 | 2 | 0.1 | 94 | 5.2 |
| 1981 | 62,935 | 2,356 | 316 | 13.4 | 40 | 1.7 | 35 | 1.5 | 212 | 9.0 | 2 | 0.1 | 167 | 7.1 |
| 1982 | 66,990 | 2,666 | 476 | 17.9 | 63 | 2.4 | 14 | 0.5 | 195 | 7.3 | 15 | 0.6 | 152 | 5.7 |
| 1983 | 72,471 | 2,643 | 506 | 19.1 | 62 | 2.4 | 59 | 2.2 | 185 | 7.0 | 3 | 0.1 | 130 | 4.9 |
| 1984 | 76,931 | 3,499 | 800 | 22.9 | 83 | 2.4 | 64 | 1.8 | 289 | 8.3 | 2 | 0.1 | 176 | 5.0 |
| 1985 | 77,892 | 4,248 | 945 | 22.3 | 102 | 2.4 | 76 | 1.8 | 393 | 9.3 | 4 | 0.1 | 257 | 6.1 |
| TOTAL | 630,925 | 22,959 | 3,952 | 17.2 | 518 | 2.3 | 348 | 1.5 | 1,833 | 8.0 | 35 | 0.2 | 1,265 | 5.7° |

Percents are of Computer Engineers *Not Available °Total and Percent based on 1976-1985

## TABLE 7-9 (continued)

BACHELOR'S DEGREES IN **ELECTRICAL ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | ELEC ENG. | WOMEN | | BLACKS | | HISPANICS | | ASIAN | | AM. INDIAN | | FOREIGN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1975 | 38,210 | 10,277 | 138 | 1.3 | 286 | 2.8 | 203 | 2.0 | 318 | 3.1 | 11 | 0.1 | * | * |
| 1976 | 37,970 | 9,954 | 207 | 2.1 | 257 | 2.6 | 194 | 2.0 | 310 | 3.1 | 11 | 0.1 | 650 | 6.5 |
| 1977 | 40,095 | 9,837 | 239 | 2.4 | 296 | 3.0 | 186 | 1.9 | 276 | 2.8 | 7 | 0.1 | 727 | 7.4 |
| 1978 | 46,091 | 10,702 | 414 | 3.9 | 293 | 2.7 | 195 | 1.8 | 270 | 2.5 | 9 | 0.1 | 686 | 6.4 |
| 1979 | 52,598 | 12,213 | 624 | 5.1 | 344 | 2.3 | 226 | 1.9 | 394 | 3.2 | 16 | 0.1 | 889 | 7.3 |
| 1980 | 58,742 | 13,594 | 807 | 5.9 | 464 | 3.4 | 269 | 2.0 | 565 | 4.2 | 13 | 0.1 | 1,095 | 8.1 |
| 1981 | 62,935 | 14,558 | 929 | 6.4 | 499 | 3.4 | 435 | 3.0 | 683 | 4.7 | 22 | 0.2 | 1,317 | 9.1 |
| 1982 | 66,990 | 16,094 | 1,280 | 8.0 | 525 | 3.3 | 344 | 2.1 | 881 | 5.5 | 19 | 0.1 | 1,333 | 8.3 |
| 1983 | 72,471 | 18,590 | 1,786 | 9.6 | 603 | 3.2 | 593 | 3.2 | 1,176 | 6.3 | 27 | 0.1 | 1,722 | 9.3 |
| 1984 | 76,931 | 20,495 | 1,996 | 9.7 | 626 | 3.1 | 526 | 2.6 | 1,320 | 6.4 | 19 | 0.1 | 1,761 | 8.6 |
| 1985 | 77,892 | 22,055 | 2,386 | 10.8 | 720 | 3.3 | 561 | 2.5 | 1,866 | 8.5 | 25 | 0.1 | 1,828 | 8.3 |
| TOTAL | 630,925 | 158,369 | 10,806 | 6.8 | 4,913 | 3.1 | 3,732 | 2.4 | 8,059 | 5.1 | 179 | 0.1 | 12,008 | 8.1° |

Percents are of Electrical Engineers *Not Available °Total and Percent based on 1976-1985

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1975 through 1985, Engineering Manpower Commission

## TABLE 7-9 (continued)

BACHELOR'S DEGREES IN **INDUSTRIAL ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | INDUS ENG. | WOMEN NO. | WOMEN % | BLACKS No. | BLACKS % | HISPANICS No. | HISPANICS % | ASIAN No. | ASIAN % | AM. INDIAN No. | AM. INDIAN % | FOREIGN No. | FOREIGN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | 38,210 | 2,096 | 62 | 3.0 | 34 | 1.6 | 42 | 2.0 | 31 | 1.5 | 0 | 0.0 | * | * |
| 1976 | 37,970 | 1,826 | 84 | 4.6 | 28 | 1.5 | 31 | 1.7 | 47 | 2.6 | 3 | 0.2 | 186 | 10.2 |
| 1977 | 40,095 | 1,805 | 114 | 6.3 | 29 | 1.6 | 43 | 2.4 | 38 | 2.1 | 1 | 0.1 | 208 | 11.5 |
| 1978 | 46,091 | 2,054 | 233 | 11.3 | 51 | 2.5 | 36 | 1.8 | 62 | 3.0 | 3 | 0.2 | 203 | 9.9 |
| 1979 | 52,598 | 2,433 | 363 | 14.9 | 58 | 2.4 | 59 | 2.4 | 52 | 2.1 | 3 | 0.1 | 239 | 9.8 |
| 1980 | 58,742 | 2,710 | 456 | 16.8 | 66 | 2.4 | 61 | 2.3 | 87 | 3.2 | 2 | 0.2 | 290 | 10.7 |
| 1981 | 62,935 | 3,225 | 623 | 19.3 | 77 | 2.4 | 127 | 3.9 | 81 | 2.5 | 3 | 0.1 | 313 | 9.7 |
| 1982 | 66,990 | 3,695 | 849 | 23.0 | 131 | 3.6 | 79 | 2.1 | 71 | 1.9 | 3 | 0.1 | 283 | 7.7 |
| 1983 | 72,471 | 3,808 | 996 | 26.2 | 159 | 4.2 | 155 | 4.1 | 112 | 2.9 | 5 | 0.1 | 374 | 9.8 |
| 1984 | 76,931 | 3,923 | 1,065 | 27.2 | 176 | 4.5 | 111 | 2.8 | 136 | 3.5 | 4 | 0.1 | 317 | 8.1 |
| 1985 | 77,892 | 4,321 | 1,219 | 28.2 | 159 | 3.7 | 108 | 2.5 | 168 | 3.9 | 6 | 0.1 | 319 | 7.4 |
| TOTAL | 630,925 | 31,894 | 6,064 | 19.0 | 963 | 3.0 | 852 | 2.7 | 885 | 2.8 | 33 | 0.1 | 2,732 | 9.2° |

Percents are of Industrial Engineers *Not Available °Total and Percent based on 1976-1985

## TABLE 7-9 (continued)

BACHELOR'S DEGREES IN **MECHANICAL ENGINEERING**, BY SEX, MINORITY GROUP AND CITIZENSHIP, 1975-1985

| YEAR | ALL ENGINEERS | MECH ENG. | WOMEN NO. | WOMEN % | BLACKS No. | BLACKS % | HISPANICS No. | HISPANICS % | ASIAN No. | ASIAN % | AM. INDIAN No. | AM. INDIAN % | FOREIGN No. | FOREIGN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | 38,210 | 7,076 | 85 | 1.2 | 150 | 2.1 | 113 | 1.6 | 130 | 1.8 | 9 | 0.1 | * | * |
| 1976 | 37,970 | 6,825 | 141 | 2.1 | 120 | 1.8 | 101 | 1.5 | 138 | 2.0 | 4 | 0.1 | 484 | 7.1 |
| 1977 | 40,095 | 7,549 | 242 | 3.1 | 163 | 2.2 | 90 | 1.2 | 182 | 2.4 | 7 | 0.1 | 534 | 7.1 |
| 1978 | 46,091 | 8,786 | 428 | 4.9 | 128 | 2.0 | 127 | 1.5 | 184 | 2.1 | 5 | 0.1 | 561 | 6.4 |
| 1979 | 52,598 | 10,076 | 593 | 5.9 | 225 | 2.3 | 152 | 1.5 | 243 | 2.4 | 18 | 0.2 | 602 | 6.0 |
| 1980 | 58,742 | 11,916 | 864 | 7.3 | 264 | 2.2 | 204 | 1.7 | 281 | 2.4 | 8 | 0.1 | 915 | 7.7 |
| 1981 | 62,935 | 13,462 | 1,070 | 8.0 | 322 | 2.4 | 259 | 1.9 | 414 | 3.1 | 18 | 0.1 | 1,092 | 8.1 |
| 1982 | 66,990 | 14,178 | 1,228 | 8.7 | 336 | 2.4 | 250 | 1.8 | 482 | 3.4 | 15 | 0.1 | 968 | 6.8 |
| 1983 | 72,471 | 16,484 | 1,503 | 9.1 | 397 | 2.4 | 338 | 2.1 | 562 | 3.4 | 21 | 0.1 | 1,182 | 7.2 |
| 1984 | 76,931 | 17,214 | 1,792 | 10.4 | 373 | 2.2 | 302 | 1.8 | 618 | 3.6 | 34 | 0.2 | 1,006 | 5.8 |
| 1985 | 77,892 | 17,152 | 1,812 | 10.6 | 401 | 2.3 | 352 | 2.1 | 691 | 4.0 | 29 | 0.2 | 976 | 5.7 |
| TOTAL | 630,925 | 130,718 | 9,758 | 7.7 | 2,929 | 2.2 | 2,288 | 1.8 | 3,925 | 3.0 | 168 | 0.1 | 8,320 | 6.7° |

Percents are of Mechanical Engineers *Not Available °Total and Percent based on 1976-1985

FIELD: Engineering

SOURCE: Engineering and Technology Degrees, 1969 through 1986 Series, Engineering Manpower Commission

## TABLE 7-10

NUMBER AND PERCENT OF ENGINEERING DEGREES GRANTED BY LEVEL OF DEGREE AND MINORITY GROUP, 1971-72 - 1985-86

| | TOTAL | | BLACK | | HISPANICS† | | ASIAN/ PACIFIC | | AMERICAN INDIAN | | FOREIGN NATIONALS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1971-72* | | | | | | | | | | | | |
| Bachelor's | 44,190 | 100.0 | 579 | 1.31 | | | | | | | 1,944 | 4.40 |
| Master's** | 17,356 | 100.0 | 78 | 0.45 | + | | + | | + | | 2,973 | 17.13 |
| Ph.D. | 3,774 | 100.0 | 13 | 0.34 | | | | | | | 773 | 20.48 |
| 1972-73 | | | | | | | | | | | | |
| Bachelor's | 43,429 | 100.0 | 657 | 1.51 | 866 | 1.99 | 684 | 1.58 | 46 | 0.11 | 2,136 | 4.92 |
| Master's** | 17,152 | 100.0 | 104 | 0.61 | 139 | 0.81 | 261 | 1.52 | 15 | 0.09 | 2,551 | 14.87 |
| Ph.D. | 3,587 | 100.0 | 13 | 0.36 | 12 | 0.34 | 55 | 1.53 | 1 | 0.03 | 708 | 19.74 |
| 1973-74 | | | | | | | | | | | | |
| Bachelor's | 41,407 | 100.0 | 756 | 1.83 | 1,037 | 2.50 | 957 | 2.31 | 32 | 0.08 | 2,436 | 5.88 |
| Master's** | 15,885 | 100.0 | 158 | 0.99 | 192 | 1.21 | 425 | 2.68 | 4 | 0.03 | 3,099 | 19.51 |
| Ph.D. | 3,362 | 100.0 | 12 | 0.36 | 20 | 0.60 | 106 | 3.15 | 0 | -- | 1,014 | 30.16 |
| 1974-75 | | | | | | | | | | | | |
| Bachelor's | 38,210 | 100.0 | 734 | 1.92 | 1,060 | 2.77 | 883 | 2.31 | 44 | 0.12 | 2,466 | 6.45 |
| Master's** | 15,773 | 100.0 | 141 | 0.89 | 185 | 1.12 | 482 | 3.06 | 3 | 0.02 | 3,250 | 20.61 |
| Ph.D. | 3,039 | 100.0 | 17 | 0.55 | 28 | 0.92 | 141 | 4.64 | 2 | 0.07 | 891 | 29.32 |
| 1975-76 | | | | | | | | | | | | |
| Bachelor's | 37,970 | 100.0 | 777 | 2.05 | 1,019 | 2.68 | 1,074 | 2.83 | 41 | 0.11 | 2,799 | 7.37 |
| Master's** | 16,506 | 100.0 | 154 | 0.93 | 191 | 1.16 | 782 | 4.74 | 14 | 0.09 | 3,691 | 22.36 |
| Ph.D. | 2,977 | 100.0 | 10 | 0.33 | 15 | 0.50 | 168 | 5.64 | 0 | -- | 1,060 | 35.61 |
| 1976-77 | | | | | | | | | | | | |
| Bachelor's | 40,095 | 100.0 | 844 | 2.11 | 1,035 | 2.58 | 1,146 | 2.86 | 36 | 0.09 | 2,996 | 7.47 |
| Master's** | 16,551 | 100.0 | 147 | 0.89 | 217 | 1.31 | 708 | 4.28 | 7 | 0.04 | 3,825 | 23.11 |
| Ph.D. | 2,814 | 100.0 | 16 | 0.57 | 22 | 0.78 | 158 | 5.62 | 1 | 0.04 | 995 | 35.36 |
| 1977-78 | | | | | | | | | | | | |
| Bachelor's | 46,091 | 100.0 | 894 | 1.94 | 1,072 | 2.33 | 1,195 | 2.59 | 37 | 0.08 | 3,084 | 6.69 |
| Master's** | 16,182 | 100.0 | 202 | 1.25 | 243 | 1.50 | 797 | 4.93 | 4 | 0.03 | 3,720 | 22.99 |
| Ph.D. | 2,573 | 100.0 | 15 | 0.58 | 25 | 0.97 | 175 | 6.80 | 3 | 0.2 | 874 | 33.97 |
| 1978-79 | | | | | | | | | | | | |
| Bachelor's | 52,598 | 100.0 | 1,076 | 2.05 | 1,212 | 2.30 | 1,532 | 2.91 | 59 | 0.11 | 3,788 | 7.20 |
| Master's** | 15,624 | 100.0 | 157 | 1.01 | 213 | 1.36 | 675 | 4.32 | 9 | 0.06 | 3,944 | 25.24 |
| Ph.D. | 2,815 | 100.0 | 19 | 0.68 | 22 | 0.78 | 177 | 6.29 | 0 | - | 929 | 33.00 |
| 1979-80 | | | | | | | | | | | | |
| Bachelor's | 58,742 | 100.0 | 1,320 | 2.25 | 1,332 | 2.27 | 1,922 | 3.27 | 60 | 0.10 | 4,895 | 8.33 |
| Master's** | 17,243 | 100.0 | 167 | 0.97 | 247 | 1.43 | 827 | 4.80 | 4 | 0.02 | 4,512 | 26.17 |
| Ph.D. | 2,751 | 100.0 | 19 | 0.69 | 25 | 0.91 | 154 | 5.60 | 1 | 0.04 | 982 | 35.70 |
| 1980-81 | | | | | | | | | | | | |
| Bachelor's | 62,935 | 100.0 | 1,445 | 2.30 | 1,513 | 2.40 | 2,267 | 3.60 | 90 | 0.14 | 5,622 | 8.93 |
| Master's** | 17,914 | 100.0 | 183 | 1.02 | 281 | 1.57 | 968 | 5.40 | 8 | 0.04 | 4,677 | 26.11 |
| Ph.D. | 2,841 | 100.0 | 16 | 0.56 | 20 | 0.70 | 148 | 5.21 | 3 | 0.11 | 1,054 | 37.10 |
| 1981-82 | | | | | | | | | | | | |
| Bachelor's | 66,990 | 100.0 | 1,644 | 2.45 | 1,608 | 2.40 | 2,577 | 3.85 | 91 | 0.14 | 5,410 | 8.08 |
| Master's** | 18,543 | 100.0 | 188 | 1.01 | 218 | 1.18 | 850 | 4.58 | 15 | 0.80 | 5,284 | 28.50 |
| Ph.D. | 2,887 | 100.0 | 11 | 0.38 | 26 | 0.90 | 124 | 4.30 | 2 | 0.07 | 1,167 | 40.42 |
| 1982-83 | | | | | | | | | | | | |
| Bachelor's | 72,471 | 100.0 | 1,842 | 2.54 | 1,883 | 2.60 | 3,098 | 4.27 | 97 | 0.13 | 6,151 | 8.49 |
| Master's** | 19,909 | 100.0 | 258 | 1.30 | 310 | 1.56 | 1,294 | 6.50 | 16 | 0.08 | 5,145 | 25.84 |
| Ph.D. | 3,023 | 100.0 | 19 | 0.63 | 41 | 1.36 | 173 | 5.72 | 0 | - | 1,192 | 39.43 |
| 1983-84 | | | | | | | | | | | | |
| Bachelor's | 76,931 | 100.0 | 2,022 | 2.63 | 2,038 | 2.65 | 3,609 | 4.69 | 112 | 0.15 | 5,833 | 7.58 |
| Master's** | 21,226 | 100.0 | 257 | 1.21 | 364 | 1.72 | 1,354 | 6.38 | 25 | 0.12 | 5,728 | 27.00 |
| Ph.D. | 3,234 | 100.0 | 24 | 0.74 | 25 | 0.77 | 267 | 8.26 | 0 | | 1,253 | 38.75 |
| 1984-85 | | | | | | | | | | | | |
| Bachelor's | 77,892 | 100.0 | 2,045 | 2.63 | 2,095 | 2.69 | 4,302 | 5.52 | 109 | 0.14 | 5,938 | 7.65 |
| Master's** | 22,502 | 100.0 | 311 | 1.38 | 371 | 1.65 | 1,529 | 6.80 | 28 | 0.12 | 6,115 | 27.18 |
| Ph.D. | 3,383 | 100.0 | 32 | 0.95 | 34 | 1.01 | 246 | 7.27 | 4 | 0.12 | 1,400 | 41.38 |
| 1985-86* | | | | | | | | | | | | |
| Bachelor's | 78,178 | 100.0 | 2,114 | 2.70 | 2,227 | 2.85 | 4,824 | 6.17 | 129 | 0.17 | 6,275 | 8.03 |
| Master's** | 23,025 | 100.0 | 345 | 1.50 | 331 | 1.44 | 1,712 | 7.44 | 27 | 0.12 | 5,735 | 24.91 |
| Ph.D. | 3,686 | 100.0 | 17 | 0.46 | 38 | 1.03 | 229 | 6.21 | 4 | 0.11 | 1,441 | 39.09 |

* Includes only numbers actually reported. ** Includes Engineer degrees. + Exempt for blacks, minority data not broken out.

† Includes U. of Puerto Rico as follows: 1973-1986 Bachelor's: 343, 397, 416, 339, 333, 324, 404, 329, 320, 338, 349, 355, 363, 363
1973-1986 Master's: 15, 6, 2, 7, 6, 9, 15, 7, 1, 8, 12, 9, 11, 9

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-11

LEADING ENGINEERING SCHOOLS IN DEGREE AWARDS TO WOMEN, 1986

| School | Bachelors Total | Bachelors Women | Bachelors %W | Masters+ Total | Masters+ Women | Masters+ %W | Doctorates Total | Doctorates Women | Doctorates %W | All Degrees Total | All Degrees Women | All Degrees %W | Rank In '80 | Rank In '82 | Rank In '84 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Texas A&M Univ | 1730 | 302 | 17.5 | 295 | 33 | 11.2 | 35 | 3 | 8.6 | 2060 | 338 | 16.4 | 3 | 1 | 11 |
| Penn State Univ | 1619 | 253 | 15.6 | 302 | 42 | 13.9 | 61 | 7 | 11.5 | 1982 | 302 | 15.2 | 8 | 7 | 4 |
| Purdue U-Lafayette | 1337 | 239 | 17.9 | 357 | 50 | 14.0 | 108 | 6 | 5.6 | 1802 | 295 | 16.4 | 1 | 2 | 1 |
| Mass Inst of Tech | 805 | 169 | 21.0 | 577 | 94 | 16.3 | 201 | 19 | 9.5 | 1583 | 282 | 17.8 | 2 | 6 | 6 |
| U Illinois-Champaign | 1330 | 215 | 16.2 | 519 | 56 | 10.8 | 151 | 9 | 6.0 | 2000 | 280 | 14.0 | 9 | 5 | 3 |
| Georgia Inst of Tech | 1193 | 212 | 17.8 | 451 | 47 | 10.4 | 54 | 1 | 1.9 | 1698 | 260 | 15.3 | 7 | 3 | 2 |
| Virginia Poly Inst | 1040 | 200 | 19.2 | 242 | 36 | 14.9 | 55 | 4 | 7.3 | 1337 | 240 | 18.0 | 14 | 9 | 9 |
| Stanford Univ | 344 | 84 | 24.4 | 837 | 143 | 17.1 | 175 | 11 | 6.3 | 1356 | 238 | 17.6 | 6 | 12 | 10 |
| Ohio State Univ | 1126 | 179 | 15.9 | 324 | 55 | 17.0 | 84 | 1 | 1.2 | 1534 | 235 | 15.3 | 29 | 10 | 8 |
| U Michigan-Ann Arbor | 1000 | 186 | 18.6 | 539 | 38 | 7.1 | 81 | 7 | 8.6 | 1620 | 231 | 14.3 | 4 | 8 | 7 |
| U Cal-Berkely | 801 | 153 | 19.1 | 463 | 64 | 13.8 | 151 | 10 | 6.6 | 1415 | 227 | 16.0 | 15 | 4 | 5 |
| U Texas-Austin | 1125 | 141 | 12.5 | 438 | 52 | 11.9 | 109 | 6 | 5.5 | 1672 | 199 | 11.9 | 18 | " | 17 |
| NC State U-Raleigh | 992 | 162 | 16.3 | 202 | 26 | 12.9 | 42 | 2 | 4.8 | 1236 | 190 | 15.4 | 34 | 17 | 12 |
| Michigan State Univ | 685 | 147 | 21.5 | 141 | 30 | 21.3 | 19 | 0 | 0.0 | 845 | 177 | 20.9 | 5 | 11 | 13 |
| Cornell University | 578 | 132 | 22.8 | 312 | 33 | 10.6 | 38 | 8 | 21.1 | 928 | 173 | 18.6 | 11 | 13 | 14 |
| U Florida | 780 | 131 | 16.8 | 272 | 35 | 12.9 | 47 | 3 | 6.4 | 1099 | 169 | 15.4 | 36 | 33 | 27 |
| U Missouri-Rolla | 1021 | 147 | 14.4 | 204 | 13 | 6.4 | 24 | 1 | 4.2 | 1249 | 161 | 12.9 | 28 | 16 | 18 |
| Rensselear Polytech | 676 | 117 | 17.3 | 303 | 39 | 12.9 | 55 | 2 | 3.6 | 1034 | 158 | 15.3 | * | 23 | 16 |
| Drexel University | 528 | 99 | 18.8 | 130 | 55 | 42.3 | 18 | 2 | 11.1 | 676 | 156 | 23.1 | | | \ |
| U Washington | 658 | 101 | 15.3 | 238 | 51 | 21.4 | 37 | 1 | 2.7 | 933 | 153 | 16.4 | 13 | 15 | 19 |
| Northwestern Univ | 307 | 95 | 30.9 | 206 | 38 | 18.4 | 70 | 10 | 14.3 | 583 | 143 | 24.5 | 39 | 26 | 39 |
| U Maryland | 771 | 109 | 14.1 | 162 | 24 | 14.8 | 27 | 3 | 11.1 | 960 | 136 | 14.2 | * | " | 33 |
| Johns Hopkins Univ | 205 | 35 | 17.1 | 428 | 93 | 21.7 | 39 | 7 | 17.9 | 672 | 135 | 20.1 | | | \ |
| Northeastern Univ | 747 | 77 | 10.3 | 249 | 55 | 22.1 | 5 | 0 | 0.0 | 1001 | 132 | 13.2 | * | 20 | 38 |
| U Wisconsin-Madison | 823 | 106 | 12.9 | 205 | 16 | 7.8 | 89 | 9 | 10.1 | 1117 | 131 | 11.7 | 31 | 14 | 21 |
| Auburn University | 689 | 122 | 17.7 | 61 | 5 | 8.2 | 14 | 1 | 7.1 | 764 | 128 | 16.8 | * | 18 | 24 |
| Colorado Sch of Mines | 503 | 99 | 19.7 | 120 | 22 | 18.3 | 22 | 2 | 9.1 | 645 | 123 | 19.1 | 20 | 31 | 35 |
| U Tennessee-Knoxville | 627 | 81 | 12.9 | 143 | 37 | 25.9 | 27 | 0 | 0.0 | 797 | 118 | 14.8 | * | " | 28 |
| Boston University | 351 | 100 | 28.5 | 80 | 16 | 20.0 | 0 | 0 | | 431 | 116 | 26.9 | * | " | 50 |
| Columbia Univ | 304 | 64 | 21.1 | 253 | 44 | 17.4 | 38 | 5 | 13.2 | 595 | 113 | 19.0 | * | 25 | 29 |
| Lehigh Univ | 453 | 88 | 19.4 | 166 | 20 | 12.0 | 41 | 5 | 12.2 | 660 | 113 | 17.1 | 14 | " | 30 |
| Worchester Poly Inst | 462 | 105 | 22.7 | 76 | 7 | 9.2 | 4 | 0 | 0.0 | 542 | 112 | 20.7 | 37 | " | 45 |
| Michigan Tech Univ | 824 | 98 | 11.9 | 73 | 11 | 15.1 | 5 | 1 | 20.0 | 902 | 110 | 12.2 | 33 | 22 | 15 |
| Gen Motors Inst | 352 | 109 | 31.0 | 0 | 0 | | 0 | 0 | | 352 | 109 | 31.0 | 37 | " | 49 |
| San Jose State Univ | 302 | 71 | 23.5 | 168 | 34 | 20.2 | 0 | 0 | | 470 | 105 | 22.3 | | | \ |
| U Colorado-Boulder | 427 | 79 | 18.5 | 108 | 23 | 21.3 | 23 | 1 | 4.3 | 558 | 103 | 18.5 | 17 | 19 | 34 |
| U Pittsburg | 512 | 85 | 16.6 | 181 | 17 | 9.4 | 25 | 0 | 0.0 | 718 | 102 | 14.2 | 10 | 24 | 22 |
| U Arizona | 527 | 81 | 15.4 | 177 | 20 | 11.3 | 24 | 1 | 4.2 | 728 | 102 | 14.0 | * | " | 42 |
| U Pennsylvania | 269 | 57 | 21.2 | 161 | 35 | 21.7 | 35 | 8 | 22.9 | 465 | 100 | 21.5 | * | " | 40 |
| Clemson Univ | 551 | 93 | 16.9 | 120 | 6 | 5.0 | 10 | 1 | 10.0 | 681 | 100 | 14.7 | * | " | 41 |
| U Virginia | 268 | 56 | 20.9 | 189 | 38 | 20.1 | 30 | 2 | 6.7 | 487 | 96 | 19.7 | 12 | 28 | 20 |
| Clarkson University | 621 | 87 | 14.0 | 52 | 6 | 11.5 | 19 | 1 | 5.3 | 692 | 94 | 13.6 | 26 | 30 | 25 |
| Iowa State Univ | 909 | 85 | 9.4 | 108 | 7 | 6.5 | 36 | 0 | 0.0 | 1053 | 92 | 8.7 | 25 | 34 | 46 |
| U Southern Cal | 484 | 55 | 11.4 | 443 | 34 | 7.7 | 34 | 2 | 5.9 | 961 | 91 | 9.5 | * | " | 36 |
| Cal State U-L Beach | 605 | 84 | 13.9 | 99 | 5 | 5.1 | 0 | 0 | | 704 | 89 | 12.6 | | | \ |
| U Cal-Los Angeles | 293 | 52 | 17.7 | 260 | 30 | 11.5 | 63 | 6 | 9.5 | 616 | 88 | 14.3 | * | 36 | 37 |
| U Mass-Amherst | 449 | 71 | 15.8 | 150 | 17 | 11.3 | 0 | 0 | | 599 | 88 | 14.7 | | | \ |
| U Missouri-Columbia | 514 | 74 | 14.4 | 119 | 12 | 10.1 | 20 | 1 | 5.0 | 653 | 87 | 13.3 | * | " | 47 |
| U Cal-San Diego | 345 | 77 | 22.3 | 67 | 8 | 11.9 | 17 | 2 | 11.8 | 429 | 87 | 20.3 | | | \ |
| Tufts University | 231 | 73 | 31.6 | 47 | 12 | 25.5 | 0 | 0 | | 278 | 85 | 30.6 | * | " | 48 |
| U New Mexico | 322 | 69 | 21.4 | 108 | 14 | 13.0 | 23 | 2 | 8.7 | 453 | 85 | 18.8 | | | \ |
| U South Florida | 382 | 76 | 19.9 | 47 | 5 | 10.6 | 5 | 0 | 0.0 | 434 | 81 | 18.7 | | | \ |
| TOTAL ALL SCHOOLS | 78178 | 11164 | 14.3 | 23024 | 2745 | 11.9 | 3686 | 246 | 6.7 | 48172 | 7692 | 16.0 | | | |

+ Includes Professional Degrees in Engineering. * Below 43rd. " Below 37th. \ Below 50th.

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-12

LEADING ENGINEERING SCHOOLS IN BACHELOR'S DEGREE AWARDS TO MINORITIES, 1986

| School | Total Degrees | Black | His-panic+ | Indian | Sub T Min | % Sub | Asian | Total Minority | Percent Minority | Rank in 1980 | Rank in 1982 | Rank in 1984 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U Cal-Berkeley | 801 | 13 | 20 | 0 | 39 | 4.9 | 292 | 331 | 41.3 | 1 | 1 | 1 |
| Cal State U-Long Beac | 605 | 31 | 35 | 4 | 60 | 9.9 | 173 | 233 | 38.5 | * | 23 | 13 |
| Cal Poly-Pomona | 544 | 8 | 34 | 8 | 50 | 9.2 | 134 | 184 | 33.8 | * | 6 | 7 |
| U Southern California | 484 | 16 | 23 | 2 | 43 | 8.9 | 128 | 171 | 35.3 | 13 | ' | 43 |
| CCNY | 335 | 40 | 38 | 0 | 98 | 29.3 | 69 | 167 | 49.9 | 2 | 2 | 5 |
| U of Hawaii | 227 | 0 | 0 | 0 | 0 | 0.0 | 159 | 159 | 70.0 | * | 3 | 9 |
| Polytech U NY | 422 | 21 | 11 | 0 | 32 | 7.6 | 124 | 156 | 37.0 | * | 16 | 8 |
| Georgia Inst of Tech | 1193 | 18 | 42 | 1 | 111 | 9.3 | 42 | 153 | 12.8 | 15 | 4 | 6 |
| U Illinois-Champaign | 1330 | 13 | 21 | 2 | 46 | 3.5 | 102 | 148 | 11.1 | 7 | 12 | 14 |
| U Texas-Austin | 1125 | 3 | 51 | 1 | 55 | 4.9 | 86 | 141 | 12.5 | 5 | 7 | 4 |
| U Cal-Los Angeles | 293 | 7 | 13 | 0 | 20 | 6.8 | 119 | 139 | 47.4 | 20 | 13 | 3 |
| Mass Inst of Tech | 805 | 38 | 16 | 2 | 56 | 7.0 | 83 | 179 | 17.0 | 19 | 11 | 10 |
| Texas A&M U | 1730 | 22 | 93 | 3 | 118 | 6.8 | 16 | 134 | 7.7 | * | 31 | 33 |
| U of Washington | 658 | 10 | 3 | 5 | 18 | 2.7 | 115 | 133 | 20.2 | 22 | 9 | 12 |
| U of Miami, FL | 270 | 5 | 85 | 2 | 92 | 34.1 | 33 | 125 | 46.3 | 25 | 26 | 29 |
| San Jose State U | 302 | 5 | 11 | 2 | 18 | 6.0 | 102 | 120 | 39.7 | 27 | ' | 2 |
| Columbia U | 304 | 3 | 15 | 0 | 18 | 5.9 | 94 | 112 | 36.8 | * | ' | 18 |
| Howard U | 135 | 112 | 0 | 0 | 112 | 83.0 | 0 | 112 | 83.0 | 26 | 22 | 27 |
| U Cal-San Diego | 345 | 1 | 9 | 0 | 10 | 2.9 | 92 | 102 | 29.6 | | | \ |
| U of Florida | 780 | 17 | 60 | 2 | 79 | 10.1 | 22 | 101 | 12.9 | 19 | 25 | 30 |
| Cal State U-LA | 181 | 6 | 14 | 0 | 20 | 11.0 | 80 | 100 | 55.2 | * | ' | 41 |
| Cornell | 578 | 24 | 16 | 1 | 41 | 7.1 | 56 | 97 | 16.8 | * | 17 | 19 |
| NC State U-Raleigh | 992 | 45 | 12 | 3 | 60 | 6.0 | 37 | 97 | 9.8 | * | ' | 24 |
| U Tennessee-Knoxville | 627 | 36 | 17 | 2 | 55 | 8.8 | 38 | 93 | 14.8 | 5 | 8 | 28 |
| U Maryland | 771 | 26 | 11 | 0 | 37 | 4.8 | 56 | 93 | 12.1 | | | \ |
| Pratt Institute | 161 | 53 | 13 | 0 | 66 | 41.0 | 25 | 91 | 56.5 | 21 | 21 | 51 |
| Prairie View A&M U | 115 | 85 | 0 | 0 | 85 | 73.9 | 2 | 87 | 75.7 | 15 | 5 | 15 |
| U New Mexico | 322 | 3 | 67 | 2 | 72 | 22.4 | 14 | 86 | 26.7 | * | 38 | 45 |
| NC A&T State Univ | 133 | 84 | 0 | 0 | 84 | 63.2 | 0 | 84 | 63.2 | 12 | ' | 40 |
| U Cal-Santa Barbara | 343 | 6 | 17 | 1 | 24 | 7.0 | 60 | 84 | 24.5 | * | ' | 48 |
| Tuskegee | 89 | 83 | 0 | 0 | 83 | 93.3 | 0 | 83 | 93.3 | * | ' | 25 |
| U Texas-El Paso | 184 | 2 | 72 | 0 | 74 | 40.2 | 7 | 81 | 44.0 | 16 | 15 | 21 |
| Stanford | 344 | 16 | 24 | 2 | 42 | 12.2 | 34 | 76 | 22.1 | 23 | 29 | 26 |
| Virginia Poly Inst | 1040 | 22 | 1 | 0 | 23 | 2.2 | 53 | 76 | 7.3 | * | 32 | 34 |
| Rutgers U | 577 | 9 | 13 | 0 | 22 | 3.8 | 54 | 76 | 13.2 | * | ' | 49 |
| U Texas-Arlington | 344 | 6 | 10 | 0 | 16 | 4.7 | 60 | 76 | 22.1 | * | ' | 50 |
| Cal State U-Northridg | 226 | 13 | 18 | 0 | 31 | 13.7 | 45 | 76 | 33.6 | | | \ |
| U of Michigan | 1000 | 18 | 9 | 4 | 31 | 3.1 | 44 | 75 | 7.5 | * | ' | 17 |
| U Cal-Davis | 315 | 4 | 12 | 2 | 18 | 5.7 | 57 | 75 | 23.8 | 11 | 18 | 22 |
| Drexel U | 528 | 39 | 6 | 0 | 45 | 8.5 | 30 | 75 | 14.2 | * | ' | 32 |
| Illinois Inst of Tech | 302 | 23 | 9 | 0 | 32 | 10.6 | 42 | 74 | 24.5 | | | \ |
| U South Florida | 382 | 15 | 36 | 0 | 51 | 13.4 | 23 | 74 | 19.4 | | | \ |
| Purdue U-W Lafayette | 1337 | 30 | 11 | 0 | 41 | 3.1 | 31 | 72 | 5.4 | * | 19 | 20 |
| Cal Poly-San Luis Ob | 388 | 1 | 18 | 4 | 23 | 5.9 | 48 | 71 | 18.3 | * | ' | 16 |
| San Diego State U | 374 | 2 | 15 | 3 | 20 | 5.3 | 50 | 70 | 18.7 | * | ' | 31 |
| Ohio State U | 1129 | 28 | 5 | 0 | 33 | 2.9 | 33 | 66 | 5.8 | * | ' | 47 |
| U Houston | 293 | 9 | 9 | 0 | 18 | 6.1 | 48 | 66 | 22.5 | | | \ |
| Wichita State Univ | 164 | 2 | 3 | 1 | 6 | 3.7 | 59 | 65 | 39.6 | | | \ |
| Rensselaer Polytech | 676 | 11 | 21 | 0 | 32 | 4.7 | 32 | 64 | 9.5 | * | ' | 23 |
| NM State Univ | 263 | 0 | 58 | 0 | 58 | 22.1 | 2 | 60 | 22.8 | * | 36 | 42 |
| U Arizona | 527 | 2 | 27 | 2 | 31 | 5.9 | 29 | 60 | 11.4 | | | \ |
| Southern U | 174 | 59 | 0 | 0 | 59 | 33.9 | 0 | 59 | 33.9 | 10 | 27 | 38 |
| Boston University | 351 | 11 | 11 | 0 | 22 | 6.3 | 37 | 59 | 16.8 | | | \ |
| Northwestern U | 307 | 32 | 7 | 1 | 40 | 13.0 | 19 | 59 | 19.2 | * | 34 | 52 |
| U Cal-Irvine | 132 | 0 | 6 | 0 | 6 | 4.5 | 48 | 54 | 40.9 | * | 28 | 36 |
| U District of Columbi | 89 | 35 | 14 | 0 | 49 | 55.1 | 4 | 53 | 59.6 | * | ' | 44 |
| U Missouri-Rolla | 1021 | 21 | 13 | 1 | 35 | 3.4 | 17 | 52 | 5.1 | * | ' | 39 |
| Penn State University | 1619 | 8 | 7 | 2 | 17 | 1.1 | 33 | 50 | 3.1 | | | \ |
| TOTAL ALL SCHOOLS+ | 77809 | 2114 | 1858 | 129 | 4101 | 5.3 | 4826 | 8927 | 11.5 | | | |

+Excludes U of Puerto Rico which had 369 graduates. * Below 27th in 1980.
'Below 39th in 1982. \ below 57th in 1984.

FIELD: Engineering

SOURCE: Digest of Education Statistics 1977-1987; Fall Enrollment in Colleges and Universities, 1980; Projections of Education Statistics to 1992-93, and personal communications, 1984-87, National Center for Education Statistics. Engineering Enrollments Series, 1970-86, Engineering Manpower Commission

## TABLE 7-13

ENGINEERING ENROLLMENTS RELATED TO HIGH SCHOOL GRADUATES, ENTERING FRESHMEN AND TOTAL ENROLLMENTS, BY SEX, 1970 - 1986

| YEAR | HIGH SCHOOL GRADUATES | | FIRST TIME ENROLLMENT | | | | TOTAL ENROLLMENT | | | | First Time Enrollment as % of H.S. Graduates | | Engineering as % of First Time Enrollment | | Engineering as % of Total Enrollment | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | All Fields | | Engineering | | All Fields | | Engineering | | | | | | | |
| | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| 1970 Number | 1,433,000 | 1,463,000 | 983,794 | 796,325 | 70,204 | 1,457 | 5,043,642 | 3,497,245 | 314,313 | 4,682 | | | | | | |
| % of Total | 49.5 | 50.5 | 55.3 | 44.7 | 98.0 | 2.0 | 58.8 | 41.2 | 98.5 | 1.5 | | 61.3 | | 4.0 | | 3.7 |
| % of Same Sex | | | | | | | | | | | 68.7 | 54.2 | 6.8 | 0.2 | 6.3 | 0.1 |
| 1971 Number | 1,506,000 | 1,530,000 | 967,859 | 797,766 | 57,025 | 1,541 | 5,207,004 | 3,741,640 | 287,551 | 5,303 | | | | | | |
| % of Total | 49.6 | 50.4 | 54.8 | 45.2 | 97.4 | 2.6 | 58.2 | 41.8 | 98.2 | 1.8 | | 58.2 | | 3.3 | | 3.3 |
| % of Same Sex | | | | | | | | | | | 64.3 | 52.1 | 5.5 | 0.2 | 5.6 | 0.1 |
| 1973 Number | 1,602,000 | 1,609,000 | 930,783 | 826,070 | 49,508 | 2,417 | 5,371,052 | 4,231,071 | 255,259 | 7,744 | | | | | | |
| % of Total | 49.9 | 50.1 | 53.0 | 47.0 | 95.3 | 4.7 | 55.9 | 44.1 | 97.1 | 2.9 | | 54.7 | | 3.0 | | 2.7 |
| % of Same Sex | | | | | | | | | | | 58.1 | 51.3 | 4.7 | 0.3 | 4.7 | 0.2 |
| 1974 Number | 1,513,000 | 1,564,000 | 972,707 | 881,735 | 59,178 | 4,266 | 5,622,429 | 4,601,300 | 265,590 | 12,397 | | | | | | |
| % of Total | 49.2 | 50.8 | 52.5 | 47.5 | 93.3 | 6.7 | 55.0 | 45.0 | 95.5 | 4.5 | | 60.2 | | 3.4 | | 2.7 |
| % of Same Sex | | | | | | | | | | | 64.3 | 56.4 | 5.2 | 0.5 | 4.9 | 0.3 |
| 1975 Number | 1,541,000 | 1,599,000 | 991,914 | 918,211 | 68,613 | 6,730 | 6,148,997 | 5,035,862 | 292,955 | 19,923 | | | | | | |
| % of Total | 49.1 | 50.9 | 51.9 | 48.1 | 91.1 | 8.9 | 55.0 | 45.0 | 93.6 | 6.4 | | 60.8 | | 3.9 | | 2.8 |
| % of Same Sex | | | | | | | | | | | 64.4 | 57.4 | 5.6 | 0.7 | 5.1 | 0.4 |
| 1977 Number | 1,548,000 | 1,606,000 | 1,172,147 | 1,259,453 | 78,859 | 9,921 | 5,789,076 | 5,496,771 | 340,265 | 33,917 | | | | | | |
| % of Total | 49.1 | 50.9 | 48.2 | 51.8 | 88.8 | 10.2 | 51.3 | 48.7 | 90.9 | 9.1 | | 77.1 | | 3.6 | | 3.3 |
| % of Same Sex | | | | | | | | | | | 75.2 | 78.4 | 6.7 | 0.8 | 5.9 | 0.6 |
| 1978 Number | 1,535,000 | 1,599,000 | 1,141,777 | 1,247,850 | 84,016 | 11,789 | 5,640,998 | 5,619,094 | 356,438 | 40,156 | | | | | | |
| % of Total | 49.0 | 51.0 | 51.0 | 49.0 | 87.7 | 12.3 | 50.2 | 49.8 | 89.9 | 10.1 | | 76.2 | | 4.0 | | 3.5 |
| % of Same Sex | | | | | | | | | | | 74.4 | 78.0 | 7.4 | 0.9 | 6.3 | 0.7 |
| 1979 Number | 1,531,800 | 1,602,400 | 1,194,534 | 1,343,585 | 89,693 | 14,031 | 5,682,877 | 5,887,022 | 383,876 | 49,575 | | | | | | |
| % of Total | 48.9 | 51.1 | 47.1 | 52.9 | 86.5 | 13.5 | 49.1 | 50.9 | 88.6 | 11.4 | | 79.9 | | 4.1 | | 3.7 |
| % of Same Sex | | | | | | | | | | | 77.0 | 82.6 | 7.6 | 1.1 | 6.7 | 0.8 |
| 1980 Number | 1,355,198 | 1,401,425 | 1,233,446 | 1,391,629 | 94,145 | 16,004 | 5,874,374 | 6,222,521 | 411,709 | 58,220 | | | | | | |
| % of Total | 49.2 | 50.8 | 47.0 | 53.0 | 85.5 | 14.5 | 48.6 | 51.4 | 87.6 | 12.4 | | 95.2 | | 4.2 | | 3.8 |
| % of Same Sex | | | | | | | | | | | 91.0 | 99.3 | 7.6 | 1.2 | 7.0 | 0.9 |
| 1981 Number | 1,339,922 | 1,384,642 | 1,217,680 | 1,377,741 | 97,042 | 18,238 | 5,975,056 | 6,396,616 | 431,202 | 66,790 | | | | | | |
| % of Total | 49.2 | 50.8 | 46.9 | 53.1 | 84.2 | 15.8 | 48.3 | 51.7 | 86.6 | 13.4 | | 95.3 | | 4.4 | | 4.0 |
| % of Same Sex | | | | | | | | | | | 90.9 | 99.5 | 8.0 | 1.3 | 7.2 | 1.0 |
| 1982 Number | 1,474,000 | 1,527,000 | 1,199,237 | 1,306,229 | 96,148 | 19,155 | 5,981,272 | 6,376,728 | 441,916 | 75,413 | | | | | | |
| % of Total | 49.1 | 50.9 | 47.9 | 52.1 | 83.4 | 16.6 | 48.4 | 51.6 | 85.4 | 14.6 | | 83.5 | | 4.6 | | 4.2 |
| % of Same Sex | | | | | | | | | | | 81.4 | 85.5 | 8.0 | 1.5 | 7.4 | 1.2 |
| 1983 Number | 1,451,000 | 1,465,000 | 1,159,049 | 1,284,654 | 90,949 | 18,689 | 6,023,725 | 6,440,936 | 452,804 | 79,441 | | | | | | |
| % of Total | 49.8 | 50.2 | 47.4 | 52.6 | 83.0 | 17.0 | 48.3 | 51.7 | 85.1 | 14.9 | | 83.8 | | 4.5 | | 4.3 |
| % of Same Sex | | | | | | | | | | | 79.9 | 87.7 | 7.8 | 1.5 | 7.5 | 1.2 |
| 1985 Number | 1,345,800* | 1,395,200* | 1,112,303 | 1,244,595 | 87,892 | 17,356 | 5,863,900 | 6,378,100 | 444,948 | 77,716 | | | | | | |
| % of Total | 49.1 | 50.9 | 47.6 | 52.4 | 83.5 | 16.5 | 47.9 | 52.1 | 85.9 | 14.1 | | 86.3 | | 4.5 | | 4.3 |
| % of Same Sex | | | | | | | | | | | 82.6 | 89.2 | 7.9 | 1.4 | 7.6 | 1.2 |
| 1986 Number | 1,304,100* | 1,351,900* | 1,075,736 | 1,216,486 | 86,188 | 17,037 | 5,818,450 | 6,428,605 | 438,273 | 78,[illegible] | | | | | | |
| % of Total | 49.1 | 50.9 | 46.9 | 53.1 | 83.5 | 16.5 | 47.5 | 52.5 | 86.9 | 15.1 | | 88.7 | | 4.5 | | 4.2 |
| % of Same Sex | | | | | | | | | | | 82.5 | 90.0 | 8.0 | 1.4 | 7.5 | 1.2 |

*Estimated

FIELD: Engineering

SOURCE: Engineering and Technology Enrollments Series, Fall 1973-1986, Engineering Manpower Commission

## TABLE 7-14

NUMBER AND PERCENT OF WOMEN AND MINORITIES ENROLLED IN ENGINEERING, BY DEGREE LEVEL, FALL 1973-1986

| | First Year | | Second Year | | Third Year | | 4/5th Year | | UNDERGRADUATE STUDENTS Total Full Time | | UNDERGRADUATE STUDENTS Total Part Time | | GRADUATE STUDENTS Total Full Time | | GRADUATE STUDENTS Total Part Time | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| ALL STUDENTS/FALL | | | | | | | | | | | | | | | | |
| 1973 | 51,929 | 100.0 | 40,519 | 100.0 | 41,673 | 100.0 | 52,588 | 100.0 | 186,705 | 100.0 | 15,692 | 100.0 | 34,492 | 100.0 | 26,114 | 100.0 |
| 1974 | 63,444 | 100.0 | 45,939 | 100.0 | 43,007 | 100.0 | 48,715 | 100.0 | 201,099 | 100.0 | 16,689 | 100.0 | 32,627 | 100.0 | 27,572 | 100.0 |
| 1975 | 75,343 | 100.0 | 55,891 | 100.0 | 49,338 | 100.0 | 50,807 | 100.0 | 231,379 | 100.0 | 17,041 | 100.0 | 37,285 | 100.0 | 21,173 | 100.0 |
| 1976 | 82,250 | 100.0 | 63,003 | 100.0 | 56,835 | 100.0 | 55,747 | 100.0 | 257,835 | 100.0 | 19,844 | 100.0 | 36,479 | 100.0 | 26,842 | 100.0 |
| 1977 | 88,780 | 100.0 | 70,326 | 100.0 | 64,721 | 100.0 | 65,421 | 100.0 | 289,248 | 100.0 | 20,634 | 100.0 | 39,235 | 100.0 | 25,055 | 100.0 |
| 1978 | 98,805 | 100.0 | 72,150 | 100.0 | 69,816 | 100.0 | 73,466 | 100.0 | 311,237 | 100.0 | 22,843 | 100.0 | 38,381 | 100.0 | 24,133 | 100.0 |
| 1979 | 103,724 | 100.0 | 78,594 | 100.0 | 74,928 | 100.0 | 83,242 | 100.0 | 340,488 | 100.0 | 25,811 | 100.0 | 41,384 | 100.0 | 25,768 | 100.0 |
| 1980 | 110,149 | 100.0 | 84,982 | 100.0 | 80,024 | 100.0 | 89,962 | 100.0 | 365,117 | 100.0 | 32,227 | 100.0 | 44,335 | 100.0 | 23,250 | 100.0 |
| 1981 | 115,280 | 100.0 | 87,519 | 100.0 | 86,633 | 100.0 | 98,145 | 100.0 | 387,577 | 100.0 | 32,825 | 100.0 | 47,772 | 100.0 | 29,818 | 100.0 |
| 1982 | 115,303 | 100.0 | 89,785 | 100.0 | 90,541 | 100.0 | 107,761 | 100.0 | 403,390 | 100.0 | 31,940 | 100.0 | 50,410 | 100.0 | 31,589 | 100.0 |
| 1983 | 109,638 | 100.0 | 89,515 | 100.0 | 91,233 | 100.0 | 115,758 | 100.0 | 406,144 | 100.0 | 35,061 | 100.0 | 57,366 | 100.0 | 33,674 | 100.0 |
| 1984 | 105,249 | 100.0 | 83,946 | 100.0 | 85,509 | 100.0 | 115,931 | 100.0 | 394,635 | 100.0 | 34,864 | 100.0 | 57,277 | 100.0 | 35,888 | 100.0 |
| 1985 | 103,225 | 100.0 | 79,627 | 100.0 | 84,875 | 100.0 | 116,464 | 100.0 | 384,191 | 100.0 | 36,673 | 100.0 | 60,641 | 100.0 | 34,864 | 100.0 |
| 1986 | 99,238 | 100.0 | 76,195 | 100.0 | 80,386 | 100.0 | 113,701 | 100.0 | 369,520 | 100.0 | 38,137 | 100.0 | 67,333 | 100.0 | 39,863 | 100.0 |
| WOMEN | | | | | | | | | | | | | | | | |
| 1973 | 2,417 | 4.7 | 1,487 | 3.7 | 1,140 | 2.7 | 1,020 | 1.9 | 6,064 | 3.2 | 264 | 1.7 | 869 | 2.6 | 547 | 2.2 |
| 1974 | 4,266 | 6.7 | 2,467 | 5.4 | 1,724 | 4.0 | 1,362 | 2.8 | 9,828 | 4.9 | 430 | 2.6 | 1,308 | 4.0 | 831 | 3.0 |
| 1975 | 6,730 | 8.9 | 4,197 | 7.5 | 2,862 | 5.8 | 2,063 | 4.1 | 15,852 | 6.9 | 1,628 | 9.6 | 1,585 | 4.3 | 858 | 3.2 |
| 1976 | 8,545 | 10.4 | 5,848 | 9.3 | 4,407 | 7.8 | 3,136 | 5.6 | 21,936 | 8.5 | 1,258 | 6.3 | 1,693 | 4.6 | 1,083 | 4.0 |
| 1977 | 9,921 | 11.2 | 7,537 | 10.7 | 6,193 | 9.6 | 5,122 | 7.8 | 28,773 | 9.9 | 1,192 | 5.8 | 2,661 | 6.8 | 1,291 | 5.2 |
| 1978 | 11,789 | 12.3 | 8,447 | 11.7 | 7,453 | 10.7 | 6,829 | 9.3 | 34,518 | 11.1 | 1,414 | 6.2 | 2,930 | 7.6 | 1,294 | 5.4 |
| 1979 | 14,031 | 13.5 | 10,400 | 13.2 | 8,853 | 11.8 | 8,743 | 10.5 | 42,027 | 12.3 | 2,404 | 9.3 | 3,409 | 8.2 | 1,735 | 6.7 |
| 1980 | 16,004 | 14.5 | 12,094 | 14.2 | 10,269 | 12.8 | 10,577 | 11.8 | 48,944 | 13.4 | 2,918 | 9.1 | 4,014 | 9.1 | 2,344 | 10.1 |
| 1981 | 18,238 | 15.8 | 13,285 | 15.2 | 12,023 | 13.9 | 12,503 | 12.7 | 56,049 | 14.5 | 3,220 | 9.8 | 4,627 | 9.7 | 2,894 | 9.7 |
| 1982 | 19,155 | 16.6 | 14,704 | 16.4 | 13,561 | 15.0 | 14,908 | 13.8 | 62,328 | 15.5 | 4,250 | 13.3 | 5,585 | 11.1 | 3,250 | 10.3 |
| 1983 | 18,689 | 17.0 | 15,143 | 16.9 | 14,019 | 15.4 | 16,798 | 14.5 | 64,649 | 15.9 | 4,182 | 11.9 | 6,506 | 11.3 | 4,104 | 12.2 |
| 1984 | 17,356 | 16.5 | 14,264 | 17.0 | 13,897 | 15.5 | 17,142 | 14.8 | 62,659 | 15.9 | 4,040 | 11.6 | 6,761 | 11.8 | 4,256 | 11.9 |
| 1985 | 17,037 | 16.5 | 13,288 | 16.7 | 13,523 | 15.9 | 17,754 | 15.2 | 61,602 | 16.0 | 4,650 | 12.7 | 7,401 | 12.2 | 4443 | 12.7 |
| 1986 | 15,155 | 15.3 | 12,581 | 16.5 | 12,445 | 15.5 | 17,431 | 15.3 | 57,612 | 15.6 | 5,046 | 13.2 | 8,557 | 12.7 | 5,357 | 13.4 |
| BLACK | | | | | | | | | | | | | | | | |
| 1973 | 2,130 | 4.1 | 1,324 | 3.3 | 1,056 | 2.5 | 998 | 1.9 | 5,508 | 3.0 | 503 | 3.2 | 339 | 1.0 | 229 | 0.9 |
| 1974 | 2,848 | 4.5 | 1,632 | 3.6 | 1,221 | 2.8 | 1,126 | 2.3 | 6,827 | 3.4 | 549 | 3.3 | 356 | 1.1 | 407 | 1.5 |
| 1975 | 3,840 | 5.1 | 1,980 | 3.5 | 1,366 | 2.8 | 1,203 | 2.4 | 8,389 | 3.6 | 658 | 3.9 | 390 | 1.0 | 361 | 1.3 |
| 1976 | 4,372 | 5.3 | 2,483 | 3.9 | 1,633 | 2.9 | 1,340 | 2.4 | 9,828 | 3.8 | 632 | 3.2 | 427 | 1.2 | 332 | 1.2 |
| 1977 | 4,728 | 5.3 | 2,928 | 4.2 | 2,104 | 3.3 | 1,628 | 2.5 | 11,388 | 3.9 | 613 | 3.0 | 438 | 1.1 | 487 | 1.9 |
| 1978 | 5,493 | 5.7 | 3,103 | 4.3 | 2,330 | 3.3 | 2,028 | 2.8 | 12,954 | 4.2 | 726 | 3.2 | 450 | 1.2 | 393 | 1.6 |
| 1979 | 6,339 | 6.1 | 3,451 | 4.4 | 2,687 | 3.6 | 2,309 | 2.8 | 14,786 | 4.3 | 1,056 | 4.1 | 480 | 1.2 | 348 | 1.4 |
| 1980 | 6,661 | 6.0 | 3,963 | 4.7 | 2,903 | 3.6 | 2,654 | 3.0 | 16,181 | 4.4 | 1,425 | 4.4 | 588 | 1.3 | 399 | 1.7 |
| 1981 | 7,015 | 6.1 | 4,398 | 5.0 | 3,290 | 3.8 | 2,908 | 3.0 | 17,611 | 4.5 | 1,300 | 4.0 | 553 | 1.2 | 506 | 1.7 |
| 1982 | 6,715 | 5.8 | 4,436 | 4.9 | 3,261 | 3.6 | 3,186 | 3.0 | 17,598 | 4.4 | 1,794 | 5.6 | 634 | 1.3 | 503 | 1.6 |
| 1983 | 6,342 | 5.8 | 4,314 | 4.8 | 3,487 | 3.8 | 3,674 | 3.2 | 17,817 | 4.4 | 1,881 | 5.4 | 803 | 1.4 | 673 | 2.0 |
| 1984 | 6,245 | 5.9 | 4,084 | 4.9 | 3,461 | 3.9 | 3,661 | 3.2 | 17,451 | 4.4 | 1,753 | 5.0 | 793 | 1.4 | 606 | 1.7 |
| 1985 | 6,374 | 6.2 | 3,942 | 5.0 | 3,604 | 4.2 | 4,074 | 3.5 | 17,994 | 4.7 | 1,825 | 5.0 | 845 | 1.4 | 578 | 1.7 |
| 1986 | 5,873 | 5.9 | 3,720 | 5.0 | 3,331 | 4.1 | 3,906 | 3.4 | 16,830 | 4.7 | 1,629 | 4.3 | 874 | 1.3 | 748 | 1.9 |

## TABLE 7-14 (continued)

NUMBER AND PERCENT OF WOMEN AND MINORITIES ENROLLED IN ENGINEERING, BY DEGREE LEVEL, FALL 1976-1986

| | UNDERGRADUATE STUDENTS | | | | GRADUATE STUDENTS | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | | | | Total | | | |
| | First Year | | Second Year | | Third Year | | 4/5th Year | | Full Time | | Part Time | | Full Time | | Part Time | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| HISPANIC* | | | | | | | | | | | | | | | | |
| 1976 | 1,766 | 2.2 | 1,255 | 2.0 | 1,026 | 1.8 | 1,091 | 2.0 | 5,138 | 2.0 | 419 | 2.1 | 401 | 1.1 | 261 | 1.0 |
| 1977 | 2,645 | 3.0 | 1,822 | 2.6 | 1,702 | 2.6 | 2,326 | 3.6 | 8,495 | 2.9 | 393 | 1.9 | 475 | 1.2 | 390 | 1.6 |
| 1978 | 3,296 | 3.4 | 2,078 | 2.9 | 1,930 | 2.8 | 2,527 | 3.4 | 9,831 | 3.2 | 570 | 2.5 | 426 | 1.1 | 312 | 1.3 |
| 1979 | 3,768 | 3.6 | 2,354 | 3.0 | 2,230 | 3.0 | 2,775 | 3.3 | 11,127 | 3.3 | 941 | 3.6 | 472 | 1.1 | 381 | 1.5 |
| 1980 | 4,208 | 3.8 | 2,543 | 3.0 | 2,282 | 2.9 | 2,827 | 3.1 | 11,860 | 3.2 | 1,045 | 3.2 | 476 | 1.1 | 403 | 1.7 |
| 1981 | 4,768 | 4.1 | 2,976 | 3.4 | 2,598 | 3.0 | 3,273 | 3.3 | 13,615 | 3.5 | 744 | 2.3 | 595 | 1.2 | 408 | 1.4 |
| 1982 | 4,421 | 3.8 | 3,106 | 3.5 | 2,928 | 3.2 | 3,580 | 3.3 | 14,035 | 3.5 | 1,141 | 3.6 | 564 | 1.1 | 400 | 1.3 |
| 1983 | 4,760 | 4.3 | 3,251 | 3.6 | 3,113 | 3.4 | 4,058 | 3.5 | 15,182 | 3.7 | 1,280 | 3.7 | 731 | 1.3 | 510 | 1.5 |
| 1984 | 4,814 | 4.6 | 3,290 | 3.9 | 3,339 | 3.7 | 4,346 | 3.8 | 15,775 | 4.0 | 1,300 | 3.7 | 764 | 1.3 | 548 | 1.5 |
| 1985 | 4,789 | 4.6 | 3,500 | 4.4 | 3,527 | 4.2 | 5,484 | 4.7 | 17,300 | 4.5 | 1,298 | 3.5 | 1,058 | 1.7 | 644 | 1.8 |
| 1986 | 4,299 | 4.3 | 3,221 | 4.2 | 3,389 | 4.2 | 5,363 | 4.7 | 16,272 | 4.4 | 1,314 | 3.4 | 980 | 1.5 | 622 | 1.6 |
| ASIAN/PACIFIC | | | | | | | | | | | | | | | | |
| 1976 | 1,560 | 1.9 | 1,363 | 2.2 | 1,310 | 2.3 | 1,392 | 2.5 | 5,625 | 2.2 | 509 | 2.6 | 1,422 | 3.9 | 836 | 3.1 |
| 1977 | 1,847 | 2.1 | 1,923 | 2.7 | 1,796 | 2.8 | 1,804 | 2.8 | 7,370 | 2.5 | 403 | 2.0 | 1,560 | 4.0 | 952 | 3.8 |
| 1978 | 2,169 | 2.3 | 2,006 | 2.8 | 2,200 | 3.1 | 2,265 | 3.1 | 8,640 | 2.8 | 377 | 1.7 | 1,533 | 4.0 | 973 | 4.0 |
| 1979 | 3,133 | 3.0 | 2,578 | 3.3 | 2,800 | 3.7 | 2,966 | 3.6 | 11,471 | 3.4 | 772 | 3.0 | 1,603 | 3.9 | 1,033 | 4.0 |
| 1980 | 2,889 | 2.6 | 2,791 | 3.3 | 2,746 | 3.4 | 3,253 | 3.6 | 11,679 | 3.2 | 1,093 | 3.4 | 1,657 | 3.7 | 1,453 | 6.2 |
| 1981 | 4,035 | 3.5 | 3,247 | 3.7 | 3,381 | 3.9 | 3,799 | 3.9 | 14,462 | 3.7 | 1,353 | 4.1 | 2,217 | 4.6 | 1,591 | 5.3 |
| 1982 | 4,098 | 3.6 | 3,492 | 3.9 | 3,800 | 4.2 | 4,299 | 4.0 | 15,689 | 3.9 | 1,562 | 4.9 | 2,531 | 5.0 | 1,434 | 4.5 |
| 1983 | 4,983 | 4.5 | 4,452 | 5.0 | 5,201 | 5.7 | 6,046 | 5.2 | 20,682 | 5.1 | 2,325 | 6.6 | 3,636 | 6.3 | 2,333 | 6.9 |
| 1984 | 5,614 | 5.3 | 4,901 | 5.8 | 5,951 | 6.7 | 7,147 | 6.2 | 23,613 | 6.0 | 1,836 | 5.3 | 3,280 | 5.7 | 2,322 | 6.5 |
| 1985 | 6,566 | 6.4 | 5,233 | 6.6 | 6,336 | 7.5 | 8,403 | 7.2 | 26,538 | 6.9 | 2,229 | 6.1 | 4,166 | 6.9 | 2,456 | 7.0 |
| 1986 | 6,459 | 6.5 | 5,365 | 7.0 | 6,462 | 8.0 | 8,726 | 7.7 | 27,012 | 7.3 | 3,189 | 8.4 | 3,997 | 5.9 | 3,234 | 8.1 |
| AMERICAN INDIAN | | | | | | | | | | | | | | | | |
| 1976 | 171 | 0.2 | 93 | 0.2 | 93 | 0.2 | 89 | 0.2 | 446 | 0.2 | 32 | 0.1 | 25 | 0.1 | 26 | 0.1 |
| 1977 | 244 | 0.3 | 156 | 0.2 | 118 | 0.2 | 100 | 0.2 | 618 | 0.2 | 42 | 0.2 | 39 | 0.1 | 35 | 0.1 |
| 1978 | 225 | 0.2 | 161 | 0.2 | 121 | 0.2 | 118 | 0.2 | 625 | 0.2 | 59 | 0.3 | 34 | 0.1 | 31 | 0.1 |
| 1979 | 317 | 0.3 | 146 | 0.2 | 152 | 0.2 | 144 | 0.2 | 759 | 0.2 | 60 | 0.2 | 57 | 0.1 | 17 | 0.1 |
| 1980 | 365 | 0.3 | 187 | 0.2 | 174 | 0.2 | 177 | 0.2 | 903 | 0.2 | 117 | 0.4 | 45 | 0.1 | 63 | 0.2 |
| 1981 | 412 | 0.4 | 189 | 0.2 | 176 | 0.2 | 193 | 0.2 | 970 | 0.3 | 113 | 0.3 | 42 | 0.1 | 53 | 0.2 |
| 1982 | 371 | 0.3 | 266 | 0.3 | 205 | 0.2 | 236 | 0.2 | 1,078 | 0.3 | 145 | 0.5 | 89 | 0.2 | 64 | 0.2 |
| 1983 | 376 | 0.3 | 259 | 0.3 | 236 | 0.3 | 276 | 0.2 | 1,127 | 0.3 | 145 | 0.4 | 53 | 0.1 | 60 | 0.2 |
| 1984 | 410 | 0.4 | 241 | 0.3 | 232 | 0.3 | 303 | 0.3 | 1,186 | 0.3 | 92 | 0.3 | 73 | 0.1 | 51 | 0.1 |
| 1985 | 365 | 0.4 | 246 | 0.3 | 221 | 0.3 | 288 | 0.2 | 1,120 | 0.3 | 120 | 0.3 | 72 | 0.1 | 54 | 0.2 |
| 1986 | 353 | 0.4 | 201 | 0.3 | 216 | 0.3 | 301 | 0.3 | 1,071 | 0.3 | 124 | 0.3 | 71 | 0.1 | 52 | 0.1 |
| FOREIGN NATIONAL | | | | | | | | | | | | | | | | |
| 1977 | | | | | | | | | | | | | 11,300 | 28.8 | 1,962 | 7.8 |
| 1978 | | | | | | | | | | | | | 11,532 | 30.0 | 2,361 | 9.8 |
| 1979 | 4,984 | 4.8 | 4,771 | 6.1 | 5,583 | 7.5 | 6,298 | 7.6 | 21,636 | 6.4 | 1,125 | 4.4 | 14,061 | 34.0 | 1,555 | 6.0 |
| 1980 | 5,095 | 4.6 | 5,436 | 6.4 | 6,496 | 8.1 | 7,627 | 8.5 | 24,654 | 6.8 | 1,474 | 4.6 | 16,120 | 36.4 | 2,690 | 11.6 |
| 1981 | 4,974 | 4.3 | 5,611 | 6.4 | 6,831 | 7.9 | 7,951 | 8.1 | 25,367 | 6.5 | 1,218 | 3.7 | 17,985 | 37.6 | 2,577 | 8.6 |
| 1982 | 4,925 | 4.3 | 5,148 | 5.7 | 6,176 | 6.8 | 7,358 | 6.8 | 23,607 | 5.9 | 1,443 | 4.5 | 17,651 | 35.0 | 2,670 | 8.5 |
| 1983 | 5,234 | 4.8 | 5,161 | 5.8 | 6,194 | 6.8 | 8,394 | 7.3 | 24,983 | 6.2 | 1,454 | 4.1 | 20,110 | 35.0 | 3,530 | 10.5 |
| 1984 | 4,850 | 4.6 | 5,478 | 6.5 | 6,211 | 6.9 | 8,275 | 7.1 | 24,814 | 6.3 | 1,305 | 3.7 | 20,294 | 35.4 | 3,579 | 10.0 |
| 1985 | 5,282 | 5.1 | 5,553 | 7.0 | 6,756 | 8.0 | 9,464 | 8.1 | 27,055 | 7.0 | 1,536 | 4.2 | 21,953 | 36.2 | 3,622 | 10.4 |
| 1986 | 4,154 | 4.2 | 4,864 | 6.4 | 5,586 | 6.9 | 8,143 | 7.2 | 22,747 | 6.2 | 1,608 | 3.4 | 24,864 | 36.9 | 4,437 | 11.1 |

* Includes enrollment at the University of Puerto Rico.

FIELD: Engineering

SOURCE: Engineering and Technology Enrollments, Fall 1985, Part I, Engineering Manpower Commission

## TABLE 7-15

NUMBER AND PERCENT OF WOMEN AND MINORITIES ENROLLED FULL TIME, BY CURRICULUM AND LEVEL, FALL 1985

| Curriculum | Total All Students | | Women | | Black | | Hispanic | | Asian/ Pacific | | American Indian | | Foreign | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UG | Grad | UG | Grad | UG | Grad | UG | Grad | UG | Grad | UG | Grad | UG | Grad |
| Aerospace | 15699 | 1937 | 1611 | 132 | 507 | 21 | 545 | 29 | 702 | 70 | 49 | 4 | 549 | 570 |
| Agricultural | 2300 | 786 | 245 | 65 | 28 | 11 | 53 | 5 | 23 | 26 | 12 | 0 | 102 | 301 |
| Architectural | 3009 | 89 | 583 | 9 | 371 | 2 | 178 | 1 | 100 | 1 | 7 | 0 | 302 | 31 |
| BioEngineering | 3518 | 989 | 1210 | 259 | 155 | 15 | 122 | 16 | 309 | 67 | 8 | 4 | 166 | 173 |
| Ceramic | 1144 | 260 | 315 | 48 | 31 | 3 | 14 | 6 | 37 | 17 | 0 | 1 | 11 | 102 |
| Chemical | 23423 | 5252 | 6447 | 755 | 1161 | 61 | 1313 | 112 | 1112 | 325 | 54 | 4 | 1269 | 1725 |
| Civil | 34547 | 7508 | 4803 | 856 | 1278 | 91 | 2213 | 143 | 1619 | 451 | 116 | 9 | 4431 | 3368 |
| Computer | 20712 | 5361 | 4701 | 993 | 1207 | 68 | 1306 | 104 | 1729 | 435 | 65 | 6 | 1587 | 1472 |
| Elec/Electronic | 112205 | 15928 | 14313 | 1440 | 6098 | 278 | 5147 | 299 | 11168 | 1419 | 348 | 15 | 9155 | 5587 |
| Engr. Science | 7092 | 2362 | 1251 | 261 | 203 | 24 | 184 | 17 | 338 | 94 | 25 | 2 | 344 | 826 |
| Environmental | 707 | 978 | 159 | 313 | 14 | 12 | 12 | 8 | 18 | 36 | 2 | 1 | 21 | 249 |
| General | 21574 | 1508 | 3943 | 255 | 913 | 43 | 784 | 27 | 1725 | 101 | 83 | 4 | 747 | 482 |
| Industrial | 16434 | 2675 | 4856 | 522 | 976 | 47 | 1228 | 75 | 1002 | 153 | 38 | 2 | 1583 | 1076 |
| Marine | 2068 | 501 | 198 | 49 | 33 | 1 | 54 | 4 | 54 | 17 | 3 | 0 | 108 | 190 |
| Materials & Metals | 3204 | 2511 | 710 | 379 | 83 | 23 | 108 | 32 | 184 | 127 | 13 | 3 | 178 | 989 |
| Mechanical | 66738 | 8778 | 7353 | 613 | 2740 | 110 | 2789 | 142 | 3476 | 665 | 154 | 12 | 3946 | 3615 |
| Mining | 2431 | 860 | 424 | 154 | 13 | 3 | 34 | 7 | 34 | 38 | 14 | 3 | 153 | 237 |
| Nuclear | 1857 | 1069 | 205 | 92 | 45 | 15 | 69 | 17 | 80 | 72 | 2 | 1 | 59 | 490 |
| Petroleum | 4038 | 493 | 491 | 38 | 99 | 5 | 151 | 4 | 102 | 19 | 16 | 0 | 473 | 204 |
| Systems | 2033 | 640 | 555 | 144 | 92 | 11 | 33 | 9 | 89 | 31 | 4 | 1 | 121 | 235 |
| All Other | 39458 | 156 | 7229 | 24 | 1947 | 1 | 963 | 1 | 2637 | 2 | 104 | 0 | 1750 | 31 |
| TOTAL | 384,191 | 60,641 | 61,602 | 7,401 | 17,994 | 845 | 17,300 | 1,058 | 26,538 | 4,166 | 1,120 | 72 | 27,055 | 21,953 |
| | | | | | PERCENT | | | | | | | | | |
| Aerospace | 100 | 100 | 10.3 | 6.8 | 3.2 | 1.1 | 3.5 | 1.5 | 4.5 | 3.6 | 0.3 | 0.2 | 3.5 | 29.4 |
| Agricultural | 100 | 100 | 10.7 | 8.3 | 1.2 | 1.4 | 2.3 | 0.6 | 1.0 | 3.3 | 0.5 | 0.0 | 4.4 | 38.3 |
| Architectural | 100 | 100 | 19.4 | 10.1 | 12.3 | 2.2 | 5.9 | 1.1 | 3.3 | 1.1 | 0.2 | 0.0 | 10.0 | 34.8 |
| BioEngineering | 100 | 100 | 34.4 | 26.2 | 4.4 | 1.5 | 3.5 | 1.6 | 8.8 | 6.8 | 0.2 | 0.4 | 4.7 | 17.5 |
| Ceramic | 100 | 100 | 27.5 | 18.5 | 2.7 | 1.2 | 1.2 | 2.3 | 3.2 | 6.5 | 0.0 | 0.4 | 1.0 | 39.2 |
| Chemical | 100 | 100 | 27.5 | 14.4 | 5.0 | 1.2 | 5.6 | 2.1 | 4.7 | 6.2 | 0.2 | 0.1 | 5.4 | 32.8 |
| Civil | 100 | 100 | 13.9 | 11.4 | 3.7 | 1.2 | 6.4 | 1.9 | 4.7 | 6.0 | 0.3 | 0.1 | 12.8 | 44.9 |
| Computer | 100 | 100 | 22.7 | 18.5 | 5.8 | 1.3 | 6.3 | 1.9 | 8.3 | 8.1 | 0.3 | 0.1 | 7.7 | 27.5 |
| Elec/Electronic | 100 | 100 | 12.8 | 9.0 | 5.4 | 1.7 | 4.6 | 1.9 | 10.0 | 8.9 | 0.3 | 0.1 | 8.2 | 35.1 |
| Engr. Science | 100 | 100 | 17.6 | 11.0 | 2.9 | 1.0 | 2.6 | 0.7 | 4.8 | 4.0 | 0.4 | 0.1 | 4.9 | 35.0 |
| Environmental | 100 | 100 | 22.5 | 32.0 | 2.0 | 1.2 | 1.7 | 0.8 | 2.5 | 3.7 | 0.3 | 0.1 | 3.0 | 25.5 |
| General | 100 | 100 | 18.3 | 16.9 | 4.2 | 2.9 | 3.6 | 1.8 | 8.0 | 6.7 | 0.4 | 0.3 | 3.5 | 32.0 |
| Industrial | 100 | 100 | 29.5 | 19.5 | 5.9 | 1.8 | 7.5 | 2.8 | 6.1 | 5.7 | 0.2 | 0.1 | 9.6 | 40.2 |
| Marine | 100 | 100 | 9.6 | 9.8 | 1.6 | 0.2 | 2.6 | 0.8 | 2.6 | 3.4 | 0.1 | 0.0 | 5.2 | 37.9 |
| Materials & Metals | 100 | 100 | 22.2 | 15.1 | 2.6 | 0.9 | 3.4 | 1.3 | 5.7 | 5.1 | 0.4 | 0.1 | 5.6 | 39.4 |
| Mechanical | 100 | 100 | 11.0 | 7.0 | 4.1 | 1.3 | 4.2 | 1.6 | 5.2 | 7.6 | 0.2 | 0.1 | 5.9 | 41.2 |
| Mining | 100 | 100 | 17.4 | 17.9 | 0.5 | 0.3 | 1.4 | 0.8 | 1.4 | 4.4 | 0.6 | 0.3 | 6.3 | 27.6 |
| Nuclear | 100 | 100 | 11.0 | 8.6 | 2.4 | 1.4 | 3.7 | 1.6 | 4.3 | 6.7 | 0.1 | 0.1 | 3.2 | 45.8 |
| Petroleum | 100 | 100 | 12.2 | 7.7 | 2.5 | 1.0 | 3.7 | 0.8 | 2.5 | 3.9 | 0.4 | 0.0 | 11.7 | 41.4 |
| Systems | 100 | 100 | 27.3 | 22.5 | 4.5 | 1.7 | 1.6 | 1.4 | 4.4 | 4.8 | 0.2 | 0.2 | 6.0 | 36.7 |
| All Other | 100 | 100 | 18.3 | 15.4 | 4.9 | 0.6 | 2.4 | 0.6 | 6.7 | 1.3 | 0.3 | 0.0 | 4.4 | 19.9 |
| TOTAL | 100 | 100 | 16.0 | 12.2 | 4.7 | 1.4 | 4.5 | 1.7 | 6.9 | 6.9 | 0.3 | 0.1 | 7.0 | 36.2 |

FIELD: Nuclear Engineering

SOURCE: Nuclear Engineering Enrollments and Degrees, 1985, U.S. Department of Energy, DOE/ER-0268, March 1986.

## TABLE 7-16

ENROLLMENTS AND DEGREES IN NUCLEAR ENGINEERING BY SEX, MINORITY GROUP AND EDUCATION LEVEL, 1979-1985

| MINORITY GROUP, SEX & YEAR | ENROLLMENTS | | | | | | | | DEGREES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Undergraduate | | | | Graduate | | | | | | | | | |
| | 3rd Year | | 4th Year | | Master's | | Ph.D | | Bachelor's | | Master's | | Ph.D. | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| TOTAL | | | | | | | | | | | | | | |
| 1979 | 807 | 100.0 | 933 | 100.0 | 958 | 100.0 | 630 | 100.0 | 794 | 100.0 | 463 | 100.0 | 117 | 100.0 |
| 1980 | 743 | 100.0 | 786 | 100.0 | 866 | 100.0 | 619 | 100.0 | 695 | 100.0 | 365 | 100.0 | 116 | 100.0 |
| 1981 | 724 | 100.0 | 838 | 100.0 | 876 | 100.0 | 577 | 100.0 | 642 | 100.0 | 315 | 100.0 | 131 | 100.0 |
| 1982 | 800 | 100.0 | 1,005 | 100.0 | 946 | 100.0 | 606 | 100.0 | 654 | 100.0 | 339 | 100.0 | 126 | 100.0 |
| 1983 | 849 | 100.0 | 936 | 100.0 | 951 | 100.0 | 564 | 100.0 | 674 | 100.0 | 325 | 100.0 | 124 | 100.0 |
| 1984 | 757 | 100.0 | 967 | 100.0 | 924 | 100.0 | 559 | 100.0 | 728 | 100.0 | 316 | 100.0 | 132 | 100.0 |
| 1985 | 691 | 100.0 | 855 | 100.0 | 835 | 100.0 | 582 | 100.0 | 660 | 100.0 | 306 | 100.0 | 113 | 100.0 |
| WOMEN | | | | | | | | | | | | | | |
| 1979 | 61 | 7.56 | 10 | 1.07 | 55 | 5.74 | 21 | 3.33 | 36 | 4.53 | 12 | 2.59 | 1 | 0.85 |
| 1980 | 69 | 9.29 | 68 | 8.65 | 64 | 7.39 | 31 | 5.22 | 44 | 6.33 | 19 | 5.21 | - | - |
| 1981 | 65 | 8.98 | 57 | 6.80 | 55 | 6.28 | 26 | 4.51 | 46 | 7.17 | 22 | 6.98 | 6 | 4.58 |
| 1982 | 68 | 8.50 | 77 | 7.66 | 74 | 7.82 | 30 | 4.95 | 42 | 6.42 | 27 | 7.96 | 7 | 5.56 |
| 1983 | 64 | 7.53 | 80 | 8.54 | 64 | 6.73 | 31 | 5.50 | 45 | 6.68 | 18 | 5.54 | 6 | 4.84 |
| 1984 | 65 | 8.59 | 73 | 7.55 | 76 | 8.23 | 37 | 6.62 | 60 | 8.24 | 17 | 5.38 | 7 | 5.30 |
| 1985 | 83 | 12.01 | 67 | 7.84 | 79 | 9.46 | 40 | 6.87 | 61 | 9.24 | 20 | 6.54 | 5 | 4.43 |
| BLACKS | | | | | | | | | | | | | | |
| 1979 | 9 | 1.11 | 10 | 1.07 | 15 | 1.57 | 5 | 0.79 | 5 | 0.63 | - | - | 1 | 0.85 |
| 1980 | 10 | 1.35 | 9 | 1.15 | 12 | 1.39 | 8 | 1.29 | 7 | 1.01 | 4 | 1.10 | - | - |
| 1981 | 8 | 1.10 | 5 | 0.60 | 9 | 1.03 | 6 | 1.04 | 4 | 0.62 | 4 | 1.27 | 1 | 0.76 |
| 1982 | 9 | 1.13 | 3 | 0.30 | 12 | 1.27 | 6 | 0.99 | 7 | 1.07 | 5 | 1.47 | - | - |
| 1983 | 8 | 0.94 | 10 | 1.07 | 7 | 0.74 | 7 | 1.24 | 3 | 0.45 | 1 | 0.31 | - | - |
| 1984 | 5 | 0.66 | 8 | 0.83 | 6 | 0.65 | 9 | 1.61 | 4 | 0.55 | 1 | 0.32 | - | - |
| 1985 | 14 | 2.03 | 8 | 0.94 | 13 | 1.56 | 5 | 0.86 | 3 | 0.46 | 1 | 0.33 | 3 | 2.66 |
| HISPANICS | | | | | | | | | | | | | | |
| 1979 | 6 | 0.74 | 9 | 0.96 | 11 | 1.15 | 1* | 0.16 | 10 | 1.26 | 2 | 0.43 | 1 | 0.85 |
| 1980 | 10 | 1.35 | 12 | 1.53 | 11 | 1.27 | 3 | 0.48 | 6 | 0.86 | 4 | 1.10 | - | - |
| 1981 | 14 | 1.93 | 14 | 1.67 | 10 | 1.14 | 10 | 1.73 | 8 | 1.25 | 8 | 2.53 | - | - |
| 1982 | 15 | 1.88 | 16 | 1.59 | 8 | 0.85 | 6 | 0.99 | 8 | 1.22 | 3 | 0.88 | 1 | 0.79 |
| 1983 | 11 | 1.29 | 14 | 1.49 | 14 | 1.47 | 6 | 1.06 | 9 | 1.34 | 4 | 1.23 | 1 | 0.81 |
| 1984 | 3 | 0.40 | 7 | 0.72 | 16 | 1.73 | 3 | 0.54 | 11 | 1.51 | 5 | 1.58 | 1 | 0.76 |
| 1985 | 13 | 1.88 | 8 | 0.94 | 9 | 1.08 | 8 | 1.38 | 7 | 1.06 | 1 | 0.33 | - | |
| ASIAN AMERICAN | | | | | | | | | | | | | | |
| 1979 | 7 | 0.87 | 12 | 1.29 | 26 | 2.71 | 17 | 2.70 | 7 | 0.88 | 13 | 2.81 | 6 | 5.13 |
| 1980 | 9 | 1.21 | 8 | 1.02 | 21 | 2.42 | 17 | 2.75 | 6 | 0.86 | 11 | 3.01 | 3 | 2.59 |
| 1981 | 8 | 1.10 | 12 | 1.43 | 18 | 2.05 | 14 | 2.43 | 8 | 1.25 | 5 | 1.59 | 3 | 2.29 |
| 1982 | 14 | 1.75 | 12 | 1.19 | 22 | 2.33 | 14 | 2.31 | 12 | 1.83 | 9 | 2.65 | 6 | 4.76 |
| 1983 | 13 | 1.53 | 13 | 1.39 | 25 | 2.63 | 18 | 3.19 | 11 | 1.63 | 7 | 2.15 | 3 | 2.42 |
| 1984 | 16 | 2.11 | 10 | 1.03 | 20 | 2.17 | 27 | 4.83 | 3 | 0.41 | 9 | 2.85 | 4 | 3.03 |
| 1985 | 19 | 2.75 | 22 | 2.57 | 8 | 0.96 | 14 | 2.40 | 4 | 0.61 | 11 | 3.60 | 3 | 2.66 |
| AMERICAN INDIAN | | | | | | | | | | | | | | |
| 1979 | - | - | - | - | - | - | - | - | - | - | 1 | 0.22 | - | - |
| 1980 | 2 | 0.27 | 1 | 0.13 | 1 | 0.12 | - | - | - | - | - | - | - | - |
| 1981 | 1 | 0.14 | 1 | 0.12 | 1 | 0.11 | 1 | 0.17 | - | - | - | - | - | - |
| 1982 | - | - | - | - | 1 | 0.11 | - | - | - | - | - | - | - | - |
| 1983 | - | - | 1 | 0.11 | 3 | 0.32 | - | - | - | - | - | - | - | - |
| 1984 | 1 | 0.13 | - | - | 2 | 0.22 | - | - | 1 | 0.14 | - | - | - | - |
| 1985 | - | - | - | - | 2 | 0.24 | - | - | - | - | - | - | - | - |
| FORIEGN NATIONALS | | | | | | | | | | | | | | |
| 1979 | 79 | 9.79 | 72 | 7.72 | 265 | 27.66 | 285 | 45.24 | 44 | 5.54 | 110 | 23.76 | 29 | 24.79 |
| 1980 | 58 | 7.81 | 61 | 7.76 | 218 | 25.17 | 314 | 50.73 | 36 | 5.18 | 104 | 28.49 | 49 | 42.24 |
| 1981 | 43 | 5.94 | 79 | 9.43 | 205 | 23.40 | 262 | 45.41 | 42 | 6.54 | 81 | 25.71 | 63 | 48.09 |
| 1982 | 50 | 6.25 | 91 | 9.06 | 279 | 29.49 | 275 | 45.38 | 56 | 8.56 | 84 | 24.78 | 55 | 43.65 |
| 1983 | 57 | 6.71 | 58 | 5.77 | 309 | 32.49 | 287 | 50.89 | 52 | 7.72 | 100 | 30.77 | 64 | 51.61 |
| 1984 | 44 | 5.81 | 76 | 7.86 | 256 | 27.71 | 257 | 45.98 | 43 | 5.91 | 123 | 38.92 | 59 | 44.69 |
| 1985 | 37 | 5.35 | 33 | 3.86 | 247 | 29.58 | 291 | 50.00 | 37 | 5.61 | 85 | 27.78 | 65 | 57.52 |

* These figures do not include students of the University of Puerto Rico.

FIELD: Health Physics/Radiation Protection

SOURCE: Health Physics/Radiation Protection Enrollments and Degrees 1986, Department of Energy, DOE/ER-0324, May 1987

TABLE 7-17

## ENROLLMENTS AND DEGREES IN HEALTH PHYSICS/RADIATION PROTECTION BY SEX, MINORITY GROUP AND EDUCATION LEVEL, 1979-86

| Sex / Minority Group & Year | ENROLLMENTS (FALL TERM) Undergraduate Junior No. | % | Undergraduate Senior No. | % | Graduate Master's No. | % | Graduate Ph.D. No. | % | DEGREES YEAR ENDING JUNE 30 Bachelor's No. | % | Master's No. | % | Ph.D. No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL | | | | | | | | | | | | | | |
| 1980 | 257 | 100 | 154 | 100 | 427 | 100 | 317 | 100 | 144 | 100 | 186 | 100 | 52 | 100 |
| 1981 | 172 | 100 | 155 | 100 | 446 | 100 | 304 | 100 | 128 | 100 | 166 | 100 | 60 | 100 |
| 1982 | 126 | 100 | 133 | 100 | 474 | 100 | 200 | 100 | 103 | 100 | 165 | 100 | 45 | 100 |
| 1983 | 149 | 100 | 159 | 100 | 477 | 100 | 170 | 100 | 106 | 100 | 162 | 100 | 37 | 100 |
| 1984 | 171 | 100 | 157 | 100 | 624 | 100 | 169 | 100 | 113 | 100 | 180 | 100 | 43 | 100 |
| 1985 | 150 | 100 | 165 | 100 | 526 | 100 | 190 | 100 | 92 | 100 | 179 | 100 | 31 | 100 |
| 1986 | 122 | 100 | 116 | 100 | 500 | 100 | 223 | 100 | 124 | 100 | 171 | 100 | 25 | 100 |
| WOMEN | | | | | | | | | | | | | | |
| 1980 | 89 | 34.6 | 47 | 30.5 | 94 | 22.0 | 60 | 18.9 | 41 | 28.5 | 28 | 15.1 | 9 | 17.3 |
| 1981 | 62 | 36.0 | 56 | 36.1 | 125 | 28.0 | 51 | 16.8 | 28 | 21.9 | 40 | 24.1 | 9 | 15.0 |
| 1982 | 42 | 33.3 | 34 | 25.6 | 127 | 26.8 | 43 | 21.5 | 40 | 38.8 | 42 | 25.5 | 4 | 8.9 |
| 1983 | 48 | 32.2 | 54 | 34.0 | 128 | 26.8 | 35 | 20.6 | 25 | 23.6 | 51 | 31.5 | 4 | 10.8 |
| 1984 | 57 | 33.3 | 47 | 29.9 | 172 | 27.6 | 28 | 16.6 | 37 | 32.7 | 43 | 23.9 | 8 | 18.6 |
| 1985 | 56 | 37.3 | 56 | 33.9 | 161 | 30.6 | 33 | 17.4 | 33 | 35.9 | 31 | 17.3 | 9 | 29.0 |
| 1986 | 51 | 41.8 | 46 | 39.7 | 174 | 34.8 | 44 | 19.7 | 45 | 36.3 | 54 | 31.6 | 3 | 12.0 |
| BLACKS | | | | | | | | | | | | | | |
| 1980 | 21 | 8.2 | 9 | 5.8 | 9 | 2.1 | 2 | 0.6 | 7 | 4.9 | 1 | 0.5 | | |
| 1981 | 11 | 6.4 | 11 | 7.1 | 7 | 1.6 | 3 | 1.0 | 6 | 4.7 | 1 | 0.6 | | |
| 1982 | 7 | 5.6 | 4 | 3.0 | 15 | 3.2 | | | 8 | 7.8 | 5 | 3.0 | | |
| 1983 | 13 | 8.7 | 8 | 5.0 | 6 | 1.3 | 1 | 0.6 | 2 | 1.9 | 4 | 2.5 | | |
| 1984 | 11 | 6.4 | 8 | 5.1 | 14 | 2.2 | 1 | 0.6 | 4 | 3.5 | 1 | 0.6 | | |
| 1985 | 12 | 8.0 | 15 | 9.1 | 7 | 1.3 | | | 2 | 2.2 | 1 | 0.6 | | |
| 1986 | 9 | 7.4 | 4 | 3.4 | 7 | 1.4 | 1 | 0.4 | 6 | 4.8 | 1 | 0.6 | | |
| HISPANIC | | | | | | | | | | | | | | |
| 1980 | 12 | 4.7 | 7 | 4.5 | 7 | 1.6 | 3 | 0.9 | 2 | 1.4 | 3 | 1.6 | 1 | [illegible] |
| 1981 | 8 | 4.7 | 8 | 5.2 | 8 | 1.8 | 2 | 0.7 | 3 | 2.3 | 1 | 0.6 | 2 | 3.[illegible] |
| 1982 | 8 | 6.3 | 5 | 3.8 | 6 | 1.3 | 1 | 0.5 | 2 | 1.9 | 2 | 1.2 | 1 | 2.2 |
| 1983 | 8 | 5.4 | 7 | 4.4 | 8 | 1.7 | 2 | 1.2 | 1 | 0.9 | 1 | 0.6 | 1 | 2.7 |
| 1984 | 10 | 5.8 | 4 | 2.5 | 11 | 1.8 | 2 | 1.2 | 3 | 2.7 | 5 | 2.8 | | |
| 1985 | 3 | 2.0 | 10 | 6.1 | 12 | 2.3 | 3 | 1.6 | 4 | 4.3 | 6 | 3.4 | 1 | 3.2 |
| 1986 | 6 | 4.9 | | | 10 | 2.0 | 5 | 2.2 | 2 | 1.6 | 3 | 1.8 | | |
| ASIAN AMERICAN | | | | | | | | | | | | | | |
| 1980 | 19 | 7.4 | 15 | 9.7 | 3 | 0.7 | 16 | 5.0 | | | 2 | 1.1 | 1 | 1.9 |
| 1981 | 15 | 8.7 | 11 | 7.1 | 5 | 1.1 | 14 | 4.6 | 7 | 5.5 | 5 | 3.0 | 1 | 1.7 |
| 1982 | 1 | 0.8 | 4 | 3.0 | 9 | 1.9 | 7 | 3.5 | 1 | 1.0 | 2 | 1.2 | 2 | 4.4 |
| 1983 | 1 | 0.7 | 1 | 0.6 | 8 | 1.7 | 9 | 5.3 | 1 | 0.9 | 7 | 4.3 | 1 | 2.7 |
| 1984 | 1 | 0.6 | 2 | 1.3 | 10 | 1.6 | 13 | 7.7 | 1 | 0.9 | 2 | 1.1 | 4 | 9.3 |
| 1985 | | | 1 | 0.6 | 11 | 2.1 | 11 | 5.8 | 1 | 1.1 | 3 | 1.7 | 1 | 3.2 |
| 1986 | 2 | 1.6 | 1 | 0.9 | 6 | 1.2 | 16 | 7.2 | 2 | 1.6 | 2 | 1.2 | 1 | 4.0 |
| FOREIGN NATIONAL | | | | | | | | | | | | | | |
| 1980 | | | 3 | 1.9 | 36 | 8.4 | 62 | 19.6 | 2 | 1.4 | 21 | 11.3 | 7 | 13.5 |
| 1981 | 2 | 1.2 | 7 | 4.5 | 58 | 13.0 | 48 | 15.8 | 4 | 3.1 | 17 | 10.2 | 12 | 20.0 |
| 1982 | 1 | 0.8 | 2 | 1.5 | 53 | 11.2 | 38 | 19.0 | 2 | 1.9 | 28 | 17.0 | 7 | 15.6 |
| 1983 | | | 3 | 1.9 | 60 | 12.6 | 37 | 21.8 | 3 | 2.8 | 20 | 12.3 | 6 | 16.2 |
| 1984 | 1 | 0.6 | 2 | 1.3 | 48 | 7.7 | 37 | 21.9 | 3 | 2.7 | 22 | 12.2 | 9 | 20.9 |
| 1985 | 1 | 0.7 | 1 | 0.6 | 40 | 7.6 | 56 | 29.5 | 2 | 2.2 | 32 | 17.9 | 10 | 32.3 |
| 1986 | 2 | 1.6 | 3 | 2.6 | 68 | 13.6 | 68 | 30.5 | 2 | 1.6 | 25 | 14.6 | 6 | 24.0 |

FIELD: Engineering and Architecture

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, September 30, 1986

## TABLE 7-18

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN ENGINEERING AND ARCHITECTURE BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | AM. INDIAN | | ASIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | % | Women | % W | No. | % B | No. | % H | No. | % I | No. | % A | No. | % |
| General Engineering | 19,063 | 833 | 4.4 | 2,121 | 11.1 | 174 | 0.9 | 555 | 2.9 | 559 | 2.9 | 920 | 4.8 | 87 | 0.5 | 16,942 | 88.9 |
| Safety Engineering | 548 | 28 | 5.1 | 65 | 11.9 | 9 | 1.6 | 19 | 3.5 | 26 | 4.7 | 16 | 2.9 | 4 | 0.7 | 483 | 88.1 |
| Fire Preven. Engineering | 125 | 4 | 3.2 | 11 | 8.8 | 1 | 0.8 | 4 | 3.2 | 2 | 1.6 | 4 | 3.2 | 1 | 1.8 | 114 | 91.2 |
| Materials Engineering | 1,166 | 145 | 12.4 | 125 | 10.7 | 30 | 2.6 | 33 | 2.8 | 22 | 1.9 | 68 | 5.8 | 2 | 0.2 | 1,041 | 89.3 |
| Landscape Architecture | 614 | 87 | 14.2 | 27 | 4.4 | 5 | 0.8 | 7 | 1.1 | 8 | 1.3 | 8 | 1.3 | 4 | 0.7 | 587 | 95.6 |
| Architecture | 1,862 | 178 | 9.6 | 453 | 24.3 | 46 | 2.5 | 185 | 9.9 | 84 | 4.5 | 171 | 9.2 | 13 | 0.7 | 1,409 | 75.7 |
| Civil Engineering | 16,150 | 986 | 6.1 | 2,117 | 13.1 | 196 | 1.2 | 399 | 2.5 | 571 | 3.5 | 1,030 | 6.4 | 117 | 0.7 | 14,033 | 86.9 |
| Environmental Engineering | 2,596 | 433 | 16.7 | 401 | 15.4 | 81 | 3.1 | 103 | 4.0 | 93 | 3.6 | 196 | 7.6 | 9 | 0.3 | 2,195 | 84.6 |
| Mechanical Engineering | 13,033 | 648 | 5.0 | 1,852 | 14.2 | 142 | 1.1 | 412 | 3.2 | 301 | 2.3 | 1,101 | 8.4 | 38 | 0.3 | 11,181 | 85.8 |
| Nuclear Engineering | 2,653 | 128 | 4.8 | 317 | 11.9 | 20 | 0.8 | 49 | 1.8 | 25 | 0.9 | 233 | 8.8 | 10 | 0.4 | 2,336 | 88.1 |
| Electrical Engineering | 4,449 | 203 | 4.6 | 862 | 19.4 | 72 | 1.6 | 205 | 4.6 | 139 | 3.1 | 504 | 11.2 | 14 | 0.3 | 3,587 | 80.6 |
| Electronics Engineering | 25,423 | 1,268 | 5.0 | 3,548 | 14.0 | 303 | 1.2 | 930 | 3.7 | 814 | 3.2 | 1,731 | 6.8 | 75 | 0.3 | 21,875 | 86.0 |
| Biomedical Engineering | 286 | 40 | 14.0 | 28 | 9.8 | 9 | 3.1 | 6 | 2.1 | 4 | 1.4 | 18 | 6.3 | | | 258 | 90.2 |
| Aerospace Engineering | 8,621 | 492 | 5.7 | 684 | 7.9 | 69 | 0.8 | 199 | 2.3 | 204 | 2.4 | 265 | 3.1 | 16 | 0.2 | 7,937 | 92.1 |
| Naval Architecture | 1,314 | 90 | 6.8 | 194 | 14.8 | 23 | 1.8 | 49 | 3.7 | 25 | 1.9 | 119 | 9.1 | 1 | 0.1 | 1,120 | 85.2 |
| Mining Engineering | 449 | 15 | 3.3 | 31 | 6.9 | 1 | 0.2 | 1 | 0.2 | 4 | 0.9 | 23 | 5.1 | 3 | 0.7 | 418 | 93.1 |
| Petroleum Engineering | 498 | 37 | 7.4 | 41 | 8.2 | 3 | 0.6 | 8 | 1.6 | 16 | 3.2 | 12 | 2.4 | 5 | 1.0 | 457 | 91.8 |
| Agricultural Engineering | 425 | 12 | 2.8 | 17 | 4.0 | | | 1 | 0.2 | 5 | 1.2 | 8 | 1.9 | 3 | 0.7 | 408 | 96.0 |
| Ceramic Engineering | 69 | 9 | 13.0 | 4 | 5.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 5.8 | 0 | 0.0 | 65 | 94.2 |
| Chemical Engineering | 1,661 | 259 | 15.6 | 249 | 15.0 | 60 | 3.6 | 43 | 2.6 | 79 | 4.8 | 124 | 7.5 | 3 | 0.2 | 1,412 | 85.0 |
| Welding Engineering | 90 | 3 | 3.3 | 14 | 15.6 | 1 | 1.1 | 3 | 3.3 | 0 | 0.0 | 30 | 11.1 | 1 | 1.1 | 76 | 84.4 |
| Industrial Engineering | 3,051 | 303 | 10.3 | 379 | 12.4 | 66 | 2.2 | 110 | 3.6 | 94 | 3.1 | 164 | 5.4 | 11 | 0.4 | 2,672 | 87.6 |

FIELD: Engineering

SOURCE: Occupations of Federal White-Collar and Blue-Collar Workers October 31, 1985, U.S. Office of Personnel Management

TABLE 7-19

FULL-TIME FEDERAL EMPLOYMENT IN ENGINEERING BY SUPERVISORY STATUS AND SEX, OCTOBER 1985

| Occupation Code | Occupation Title | Total | Total Men | Total Women | Supervisory Total | Supervisory Men | Supervisory Women |
|---|---|---|---|---|---|---|---|
| 0801 P | GENERAL ENGINEERING | 19,569 | 18,863 | 706 | 6,103 | 6,047 | 56 |
| 0802 T | ENGINEERING TECHNICIAN | 26,676 | 24,244 | 2,432 | 1,773 | 1,747 | 26 |
| 0803 P | SAFETY ENGINEERING | 617 | 589 | 28 | 121 | 121 | |
| 0804 P | FIRE PREVENT ENGINEERING | 133 | 131 | 2 | 16 | 16 | |
| 0805 T | ENGINEERING TECHNOLOGY | ... 1 | | ... 1 | | ... | ... |
| 0806 P | MATERIALS ENGINEERING | 1,145 | 1,029 | 116 | 138 | 136 | 2 |
| 0807 P | LANDSCAPE ARCHITECTURE | 604 | 531 | 73 | 61 | 58 | 3 |
| 0808 P | ARCHITECTURE | 1,902 | 1,727 | 175 | 202 | 195 | 7 |
| 0809 T | CONSTRUCTION CONTROL | 4,357 | 4,265 | 92 | 302 | 301 | 1 |
| 0810 P | CIVIL ENGINEERING | 16,775 | 15,847 | 928 | 3,744 | 3,709 | 35 |
| 0817 T | SURVEYING TECHNICIAN | 1,973 | 1,833 | 140 | 125 | 125 | |
| 0818 T | ENGINEERING DRAFTING | 1,694 | 1,323 | 371 | 63 | 59 | 4 |
| 0819 P | ENVIRONMENTAL ENGINEERING | 2,489 | 2,131 | 358 | 433 | 418 | 15 |
| 0828 A | CONSTRUCTION ANALYST | 586 | 566 | 20 | 55 | 53 | 2 |
| 0830 P | MECHANICAL ENGINEERING | 13,583 | 12,927 | 656 | 1,323 | 1,314 | 9 |
| 0840 P | NUCLEAR ENGINEERING | 2,955 | 2,816 | 139 | 578 | 574 | 4 |
| 0850 P | ELECTRICAL ENGINEERING | 4,814 | 4,647 | 167 | 536 | 531 | 5 |
| 0855 P | ELECTRONICS ENGINEERING | 24,033 | 22,952 | 1,081 | 3,812 | 3,778 | 34 |
| 0856 T | ELECTRONICS TECHNICIAN | 21,153 | 20,555 | 598 | 2,234 | 2,224 | 10 |
| 0858 P | BIOMEDICAL ENGINEERING | 246 | 212 | 34 | 71 | 66 | 5 |
| 0861 P | AEROSPACE ENGINEERING | 8,700 | 8,267 | 433 | 1,385 | 1,374 | 11 |
| 0871 P | NAVAL ARCHITECTURE | 1,333 | 1,251 | 82 | 198 | 197 | 1 |
| 0873 A | SHIP SURVEYING | 136 | 136 | | ...10 | 10 | |
| 0880 P | MINING ENGINEERING | 462 | 450 | 12 | 104 | 104 | |
| 0881 P | PETROLEUM ENGINEERING | 504 | 469 | 35 | 101 | 101 | |
| 0890 P | AGRICULTURAL ENGINEERING | 425 | 415 | 10 | 54 | 54 | |
| 0892 P | CERAMIC ENGINEERING | ...58 | 50 | 8 | 9 | 9 | |
| 0893 P | CHEMICAL ENGINEERING | 1,779 | 1,509 | 270 | 166 | 159 | 7 |
| 0894 P | WELDING ENGINEERING | 103 | 101 | 2 | 20 | 19 | 1 |
| 0895 T | INDUSTRIAL ENGINEER TECH | 2,723 | 2,388 | 335 | 279 | 269 | 10 |
| 0896 P | INDUSTRIAL ENGINEERING | 3,061 | 2,776 | 285 | 515 | 505 | 10 |
| 0899 O | ENG & ARCH STUDNT TRAINEE | 2,387 | 1,817 | 570 | 1 | 1 | |
| 0800 | ENGINEER'G & ARCHITECTURE | 166,976 | 156,817 | 10,159 | 24,532 | 24,274 | 258 |

P=Professional T=Technical A=Analytical C=Clerical

SOURCE: Earned Degrees Conferred by U. S. Colleges and Universities 1971-72 through 1984-85, Center for Education Statistics

TABLE 7-20

DEGREES IN ENGINEERING TECHNOLOGY BY LEVEL & SEX, 1970-71 - 1984-85

| YEAR | BACHELOR'S Both Sexes | BACHELOR'S Women Only | BACHELOR'S % Women | MASTER'S Both Sexes | MASTER'S Women Only | MASTER'S % Women |
|---|---|---|---|---|---|---|
| 1970-71 | 5,148 | 42 | 0.8 | 134 | 0 | 0.0 |
| 1971-72 | 5,772 | 46 | 0.8 | 237 | 1 | 0.4 |
| 1972-73 | 4,854 | 52 | 1.1 | 122 | 2 | 1.6 |
| 1973-74 | 7,456 | 105 | 1.4 | 209 | 9 | 4.3 |
| 1974-75 | 7,497 | 192 | 2.6 | 221 | 4 | 1.8 |
| 1975-76 | 7,943 | 165 | 2.1 | 328 | 14 | 4.3 |
| 1976-77 | 8,347 | 196 | 2.3 | 284 | 23 | 8.1 |
| 1977-78 | 8,787 | 246 | 2.8 | 360 | 25 | 6.9 |
| 1978-79 | 9,355 | 327 | 3.5 | 268 | 18 | 6.7 |
| 1979-80 | 10,491 | 490 | 4.7 | 339 | 20 | 5.9 |
| 1980-81 | 11,713 | 675 | 5.8 | 323 | 39 | 12.1 |
| 1981-82 | 12,984 | 875 | 6.7 | 413 | 55 | 13.3 |
| 1982-83 | 17,022 | 1,353 | 7.9 | 520 | 51 | 9.8 |
| 1983-84 | 18,712 | 1,467 | 7.8 | 567 | 61 | 10.8 |
| 1984-85 | 18,951 | 1,457 | 7.7 | 631 | 66 | 10.5 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-21

BACHELORS DEGREES IN ENGINEERING TECHNOLOGY BY SEX, RACE/ETHNICITY AND CURRICULUM, 1984-1986

| CURRICULUM | TOTAL | | | WOMEN | | | BLACKS | | | HISPANICS | | | ASIAN/PACIFIC | | | AMERICAN INDIANS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
| Aeronautical | 189 | 208 | 273 | 4 | 6 | 19 | 2 | 3 | 3 | 2 | 12 | 17 | 1 | 13 | 16 | 0 | 0 | 1 |
| Air Cond/Heating/Refrig | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Architectual | 149 | 118 | 164 | 16 | 17 | 30 | 20 | 14 | 14 | 2 | 0 | 3 | 3 | 1 | 1 | 1 | 0 | 0 |
| Automotive | 12 | 24 | 20 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Chemical | 18 | 28 | 20 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civil/Highway/ Surveying | 780 | 682 | 648 | 50 | 49 | 51 | 24 | 20 | 41 | 25 | 22 | 17 | 28 | 22 | 11 | 3 | 5 | 1 |
| Computer | 259 | 217 | 222 | 73 | 44 | 51 | 31 | 8 | 6 | 6 | 2 | 2 | 2 | 8 | 10 | 1 | 1 | 0 |
| Construction | 548 | 540 | 545 | 40 | 28 | 26 | 24 | 18 | 22 | 13 | 5 | 6 | 32 | 3 | 9 | 0 | 1 | 0 |
| Drafting/Design | 180 | 236 | 186 | 17 | 32 | 16 | 2 | 4 | 1 | 2 | 3 | 2 | 3 | 4 | 2 | 0 | 0 | 1 |
| Electrical | 1678 | 1985 | 2079 | 102 | 90 | 94 | 70 | 80 | 100 | 48 | 32 | 11 | 75 | 47 | 42 | 2 | 2 | 1 |
| Electromechanical | 187 | 122 | 147 | 9 | 4 | 6 | 40 | 12 | 20 | 8 | 4 | 8 | 9 | 7 | 4 | 0 | 0 | 0 |
| Electronic | 2207 | 2637 | 3218 | 107 | 68 | 76 | 187 | 96 | 112 | 85 | 40 | 35 | 129 | 54 | 96 | 4 | 1 | 5 |
| Engineering Science | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| General Engineering | 624 | 828 | 985 | 32 | 60 | 85 | 13 | 20 | 20 | 29 | 26 | 52 | 33 | 55 | 66 | 1 | 9 | 6 |
| Industrial/Manufacturing | 966 | 1211 | 1427 | 167 | 199 | 159 | 71 | 63 | 36 | 23 | 25 | 17 | 14 | 23 | 13 | 0 | 1 | 1 |
| Marine | 48 | 60 | 56 | 0 | 1 | 2 | 0 | 2 | 3 | 0 | 1 | 1 | 3 | 5 | 7 | 0 | 0 | 0 |
| Materials | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mechanical | 1980 | 2113 | 2120 | 74 | 99 | 106 | 75 | 65 | 83 | 60 | 60 | 33 | 37 | 29 | 30 | 1 | 3 | 4 |
| Mining/Metallurg/Welding | 188 | 216 | 69 | 14 | 12 | 4 | 2 | 2 | 0 | 8 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nuclear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 169 | 194 | 322 | 37 | 41 | 31 | 20 | 16 | 5 | 3 | 2 | 2 | 2 | 2 | 0 | 1 | 0 | 0 |
| TOTAL | 10182 | 11419 | 12503 | 744 | 752 | 759 | 582 | 423 | 466 | 314 | 240 | 212 | 372 | 274 | 307 | 14 | 23 | 20 |

FIELD: Engineering

SOURCE: Engineering and Technology Degrees 1984 through 1986, Engineering Manpower Commission

## TABLE 7-22

ASSOCIATE DEGREES AWARDED IN ENGINEERING TECHNOLOGY BY SEX, RACE/ETHNICITY AND CURRICULUM, 1984-1986

| CURRICULUM | TOTAL | | | WOMEN | | | BLACKS | | | HISPANICS | | | ASIAN/PACIFIC | | | AMERICAN INDIANS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
| Aeronautical | 384 | 329 | 375 | 12 | 5 | 11 | 32 | 31 | 32 | 38 | 41 | 50 | 24 | 11 | 22 | 0 | 0 | 0 |
| Air Cond/Heating/Refrig | 290 | 236 | 228 | 5 | 0 | 3 | 6 | 7 | 6 | 0 | 2 | 6 | 1 | 0 | 1 | 2 | 4 | 6 |
| Architectual | 935 | 593 | 691 | 179 | 113 | 124 | 45 | 60 | 39 | 24 | 11 | 16 | 4 | 6 | 3 | 1 | 0 | 0 |
| Automotive | 314 | 180 | 190 | 7 | 2 | 5 | 25 | 12 | 17 | 6 | 3 | 6 | 1 | 1 | 3 | 0 | 1 | 2 |
| Chemical | 290 | 261 | 248 | 118 | 118 | 104 | 33 | 30 | 22 | 10 | 5 | 8 | 4 | 4 | 5 | 2 | 1 | 1 |
| Civil/Highway/ Surveying | 1078 | 904 | 1108 | 84 | 72 | 138 | 45 | 32 | 46 | 41 | 32 | 39 | 14 | 7 | 7 | 2 | 4 | 6 |
| Computer | 1309 | 1278 | 1228 | 380 | 361 | 331 | 64 | 42 | 89 | 23 | 18 | 22 | 19 | 22 | 30 | 6 | 5 | 7 |
| Construction | 304 | 248 | 273 | 16 | 9 | 22 | 15 | 10 | 15 | 8 | 4 | 11 | 1 | 2 | 3 | 2 | 2 | 2 |
| Drafting/Design | 675 | 491 | 1290 | 122 | 79 | 324 | 33 | 31 | 56 | 13 | 13 | 46 | 10 | 8 | 17 | 2 | 7 | 3 |
| Electrical | 2864 | 3089 | 3062 | 130 | 179 | 171 | 127 | 142 | 129 | 53 | 90 | 52 | 30 | 71 | 58 | 6 | 8 | 10 |
| Electromechanical | 389 | 364 | 400 | 25 | 20 | 25 | 33 | 20 | 25 | 11 | 13 | 14 | 2 | 6 | 9 | 1 | 1 | 0 |
| Electronic | 4430 | 2764 | 3093 | 274 | 212 | 174 | 239 | 118 | 127 | 126 | 44 | 52 | 156 | 85 | 109 | 19 | 5 | 14 |
| Engineering Science | 164 | 330 | 310 | 22 | 38 | 34 | 5 | 5 | 8 | 0 | 2 | 3 | 2 | 4 | 8 | 1 | 0 | 0 |
| General Engineering | 179 | 88 | 205 | 13 | 10 | 34 | 1 | 2 | 6 | 4 | 0 | 2 | 6 | 1 | 3 | 0 | 1 | 1 |
| Industrial/Manufacturing | 839 | 788 | 906 | 117 | 97 | 114 | 31 | 34 | 42 | 12 | 4 | 6 | 10 | 7 | 12 | 1 | 5 | 3 |
| Marine | 7 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Materials | 0 | 1 | 21 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mechanical | 2668 | 2233 | 2139 | 198 | 172 | 161 | 79 | 71 | 67 | 57 | 51 | 35 | 32 | 22 | 23 | 7 | 3 | 2 |
| Mining/Metallurg/Welding | 269 | 120 | 47 | 15 | 7 | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 0 | 3 | 1 | 2 | 0 | 0 |
| Nuclear | 44 | 25 | 40 | 5 | 2 | 6 | 1 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 1005 | 568 | 536 | 119 | 70 | 84 | 60 | 35 | 27 | 19 | 13 | 12 | 27 | 20 | 16 | 11 | 0 | 4 |
| TOTAL | 18432 | 14890 | 16392 | 1841 | 1566 | 1869 | 877 | 683 | 759 | 447 | 347 | 383 | 343 | 280 | 330 | 65 | 47 | 61 |

FIELD: Engineering Technology

SOURCE: Engineering and Technology Enrollments Series 1976-1985, Engineering Manpower Commission

## TABLE 7-23

ENGINEERING TECHNOLOGY ENROLLMENTS OF WOMEN AND MINORITIES

| | ASSOCIATE DEGREE & PRE-ENGINEERING PROGRAMS | | | | | BACHELOR OF TECHNOLOGY PROGRAMS | | | | | | All Post Bacc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | | | | | | Total | | |
| | 1st Year | 2nd Year | Other Years | Full Time | Part Time | 1st Year | 2nd Year | 3rd Year | 4th Year | Full Time | Part Time | |
| ALL STUDENTS | | | | | | | | | | | | |
| Fall 1976 | 55,792 | 31,771 | 1,901 | 89,464 | 36,460 | 7,134 | 5,764 | 8,467 | 7,770 | 29,135 | 6,543 | 483 |
| Fall 1977 | 56,171 | 31,874 | 1,056 | 89,101 | 82,906 | 9,506 | 7,310 | 10,417 | 10,169 | 37,402 | 9,571 | 489 |
| Fall 1978 | 44,934 | 24,035 | 733 | 69,702 | 34,589 | 8,420 | 6,816 | 9,881 | 9,911 | 35,028 | 8,400 | 482 |
| Fall 1979 | 47,517 | 24,988 | 816 | 73,321 | 41,284 | 8,680 | 6,547 | 9,902 | 9,842 | 34,971 | 9,982 | 294 |
| Fall 1980 | 67,971 | 35,434 | 1,188 | 104,593 | 54,549 | 10,998 | 8,543 | 12,271 | 12,132 | 43,944 | 12,767 | 556 |
| Fall 1981 | 55,202 | 32,461 | 872 | 88,535 | 45,299 | 10,691 | 8,313 | 13,339 | 13,020 | 45,363 | 11,409 | 546 |
| Fall 1982 | 51,513 | 29,438 | 797 | 81,748 | 45,095 | 7,826 | 7,369 | 11,419 | 11,604 | 38,118 | 10,696 | 376 |
| Fall 1983 | 36,866 | 23,618 | 925 | 61,409 | 37,229 | 16,166 | 10,181 | 11,818 | 12,875 | 51,040 | 13,252 | 296 |
| Fall 1984 | 29,211 | 20,053 | 1,165 | 50,429 | 31,811 | 17,595 | 11,663 | 15,561 | 15,911 | 60,730 | 14,640 | 287 |
| Fall 1985 | 25,618 | 16,579 | 466 | 42,663 | 29,321 | 8,771 | 6,714 | 10,554 | 13,829 | 39,868 | 11,212 | 271 |
| WOMEN | | | | | | | | | | | | |
| Fall 1976 | 3,819 | 2,117 | 68 | 6,004 | 3,225 | 426 | 426 | 365 | 245 | 1,162 | 301 | 55 |
| Fall 1977 | 4,877 | 2,499 | 54 | 7,430 | 2,411 | 587 | 464 | 549 | 354 | 1,954 | 287 | 29 |
| Fall 1978 | 4,333 | 1,918 | 38 | 6,359 | 2,500 | 681 | 564 | 629 | 502 | 2,376 | 533 | 40 |
| Fall 1979 | 5,621 | 2,428 | 180 | 8,229 | 4,923 | 800 | 533 | 595 | 447 | 2,375 | 508 | 82 |
| Fall 1980 | 8,754 | 3,795 | 371 | 12,920 | 7,594 | 1,085 | 837 | 947 | 834 | 3,703 | 776 | 60 |
| Fall 1981 | 7,838 | 3,970 | 68 | 11,876 | 8,059 | 1,360 | 978 | 1,158 | 1,067 | 4,563 | 766 | 62 |
| Fall 1982 | 6,472 | 3,503 | 45 | 10,020 | 5,389 | 762 | 624 | 848 | 736 | 2,970 | 599 | 29 |
| Fall 1983 | 4,296 | 2,701 | 38 | 7,035 | 4,307 | 1,284 | 796 | 890 | 960 | 3,930 | 964 | 42 |
| Fall 1984 | 3,640 | 2,295 | 90 | 6,025 | 3,375 | 2,211 | 1,399 | 1,634 | 1,514 | 6,758 | 1,477 | 71 |
| Fall 1985 | 3,331 | 1,877 | 20 | 5,228 | 3,744 | 774 | 605 | 814 | 1,097 | 3,290 | 958 | 44 |
| BLACKS | | | | | | | | | | | | |
| Fall 1976 | 3,917 | 2,164 | 159 | 6,240 | 3,186 | 646 | 536 | 511 | 409 | 2,102 | 386 | 52 |
| Fall 1977 | 4,347 | 1,794 | 78 | 6,219 | 2,201 | 968 | 776 | 875 | 615 | 3,234 | 320 | 55 |
| Fall 1978 | 3,892 | 1,570 | 33 | 5,495 | 2,170 | 644 | 538 | 675 | 608 | 2,465 | 353 | 23 |
| Fall 1979 | 4,101 | 1,601 | 48 | 5,750 | 2,726 | 660 | 473 | 537 | 447 | 2,117 | 323 | 8 |
| Fall 1980 | 5,888 | 2,191 | 60 | 8,139 | 3,762 | 1,071 | 752 | 896 | 716 | 3,435 | 552 | 20 |
| Fall 1981 | 4,519 | 1,834 | 67 | 6,409 | 3,860 | 1,209 | 886 | 978 | 905 | 3,978 | 538 | 39 |
| Fall 1982 | 4,567 | 1,795 | 22 | 6,384 | 2,922 | 818 | 707 | 670 | 542 | 2,737 | 483 | 7 |
| Fall 1983 | 3,512 | 1,479 | 24 | 5,014 | 2,716 | 2,544 | 1,237 | 933 | 760 | 5,474 | 889 | 15 |
| Fall 1984 | 2,611 | 1,273 | 10 | 3,894 | 2,245 | 2,588 | 1,400 | 1,310 | 1,038 | 6,336 | 1,037 | 13 |
| Fall 1985 | 2,582 | 1,121 | 5 | 3,708 | 2,671 | 1,117 | 642 | 725 | 768 | 3,252 | 474 | 54 |
| HISPANICS | | | | | | | | | | | | |
| Fall 1976 | 2,290 | 1,418 | 67 | 3,775 | 1,667 | 238 | 185 | 215 | 173 | 811 | 255 | 8 |
| Fall 1977 | 2,908 | 1,404 | 6 | 4,318 | 1,414 | 262 | 212 | 304 | 236 | 1,014 | 105 | 22 |
| Fall 1978 | 2,004 | 866 | 9 | 2,879 | 1,318 | 182 | 150 | 343 | 289 | 964 | 234 | 6 |
| Fall 1979 | 1,214 | 502 | 29 | 1,745 | 857 | 184 | 137 | 243 | 228 | 792 | 267 | 5 |
| Fall 1980 | 2,586 | 1,236 | 51 | 3,873 | 1,291 | 151 | 146 | 280 | 228 | 805 | 332 | 15 |
| Fall 1981 | 1,668 | 797 | 8 | 2,473 | 1,064 | 213 | 146 | 270 | 268 | 897 | 465 | 5 |
| Fall 1982 | 2,015 | 815 | 34 | 2,864 | 1,073 | 216 | 170 | 263 | 236 | 885 | 400 | 8 |
| Fall 1983 | 1,475 | 569 | 28 | 2,072 | 803 | 730 | 425 | 405 | 365 | 1,925 | 515 | 11 |
| Fall 1984 | 1,026 | 563 | 30 | 1,619 | 792 | 918 | 451 | 543 | 489 | 2,401 | 523 | 3 |
| Fall 1985 | 888 | 484 | 26 | 1,398 | 887 | 339 | 196 | 393 | 515 | 1,443 | 355 | 8 |
| AM. INDIAN | | | | | | | | | | | | |
| Fall 1976 | 576 | 238 | 11 | 825 | 157 | 49 | 31 | 31 | 22 | 133 | 6 | 0 |
| Fall 1977 | 408 | 175 | 2 | 585 | 137 | 42 | 24 | 35 | 39 | 140 | 40 | 0 |
| Fall 1978 | 342 | 141 | 0 | 483 | 138 | 45 | 35 | 36 | 34 | 150 | 2 | 0 |
| Fall 1979 | 335 | 133 | 5 | 473 | 124 | 32 | 24 | 39 | 36 | 131 | 18 | 0 |
| Fall 1980 | 412 | 151 | 5 | 568 | 160 | 48 | 27 | 33 | 42 | 150 | 13 | 0 |
| Fall 1981 | 420 | 174 | 3 | 597 | 152 | 42 | 16 | 23 | 31 | 112 | 39 | 1 |
| Fall 1982 | 245 | 119 | 3 | 367 | 102 | 32 | 21 | 32 | 37 | 122 | 30 | 0 |
| Fall 1983 | 311 | 121 | 3 | 435 | 92 | 105 | 71 | 64 | 84 | 324 | 28 | 2 |
| Fall 1984 | 258 | 130 | 5 | 393 | 68 | 65 | 50 | 51 | 55 | 221 | 31 | 0 |
| Fall 1985 | 259 | 110 | 1 | 370 | 84 | 45 | 35 | 33 | 55 | 168 | 13 | 0 |
| ASIAN-PACIFIC | | | | | | | | | | | | |
| Fall 1976 | 685 | 335 | 33 | 1,053 | 395 | 84 | 64 | 80 | 64 | 292 | 68 | 3 |
| Fall 1977 | 736 | 373 | 6 | 1,115 | 528 | 82 | 48 | 129 | 92 | 351 | 36 | 9 |
| Fall 1978 | 791 | 364 | 6 | 1,161 | 449 | 97 | 71 | 126 | 108 | 402 | 29 | 6 |
| Fall 1979 | 718 | 349 | 18 | 1,085 | 298 | 151 | 104 | 214 | 175 | 644 | 111 | 5 |
| Fall 1980 | 981 | 543 | 35 | 1,559 | 541 | 127 | 94 | 228 | 232 | 681 | 110 | 20 |
| Fall 1981 | 1,015 | 557 | 34 | 1,606 | 660 | 192 | 130 | 182 | 285 | 789 | 216 | 6 |
| Fall 1982 | 1,048 | 544 | 31 | 1,623 | 500 | 197 | 224 | 286 | 265 | 972 | 236 | 23 |
| Fall 1983 | 807 | 421 | 38 | 1,266 | 560 | 420 | 323 | 317 | 423 | 1,483 | 401 | 26 |
| Fall 1984 | 641 | 447 | 21 | 1,109 | 467 | 432 | 336 | 478 | 474 | 1,720 | 436 | 5 |
| Fall 1985 | 667 | 444 | 9 | 1,120 | 679 | 348 | 263 | 302 | 442 | 1,355 | 301 | 10 |

SOURCE: Digest of Education Statistics 1987, U. S. Dept. of Education
Office of Educational Research and Improvement

## TABLE 7-24

## ASSOCIATE DEGREES AND OTHER SUBBACCALAUREATE AWARDS, BY LENGTH AND TYPE OF CURRICULUM AND SEX, 1983-84

| Field of study | Less than 1-year awards | | | 1- to 4-year awards | | | Associate degrees | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Total** | **33,283** | **14,881** | **18,402** | **124,633** | **61,359** | **63,274** | **452,416** | **202,762** | **249,654** |
| Agriculture and natural resources, total | 792 | 650 | 142 | 2,970 | 2,152 | 818 | 6,879 | 4,763 | 2,116 |
| Agricultural business and agricultural production | 712 | 588 | 124 | 2,150 | 1,587 | 563 | 4,395 | 3,140 | 1,255 |
| Agricultural science | 34 | 20 | 14 | 614 | 412 | 202 | 1,367 | 706 | 661 |
| Renewable natural resources | 46 | 42 | 4 | 206 | 153 | 53 | 1,117 | 917 | 200 |
| Architecture and environmental design | 32 | 1 | 31 | 400 | 43 | 357 | 1,495 | 258 | 1,237 |
| Area and ethnic studies | 19 | 11 | 8 | 15 | 3 | 12 | 30 | 11 | 19 |
| Business and management | 9,098 | 2,485 | 6,613 | 37,106 | 10,775 | 26,331 | 120,034 | 42,494 | 77,540 |
| Accounting | 172 | 48 | 124 | 799 | 222 | 577 | 6,128 | 1,940 | 4,188 |
| Business and management, general | 371 | 150 | 221 | 668 | 270 | 398 | 13,934 | 6,561 | 7,373 |
| Business administration and management | 80 | 35 | 45 | 609 | 297 | 312 | 18,683 | 9,047 | 9,636 |
| Business and management, other | 1,802 | 993 | 809 | 7,783 | 6,280 | 1,503 | 11,424 | 6,464 | 4,960 |
| Business data processing | 1,031 | 289 | 742 | 4,768 | 1,572 | 3,196 | 18,709 | 8,419 | 10,290 |
| Secretarial and related programs | 2,639 | 87 | 2,552 | 13,354 | 319 | 13,035 | 21,070 | 309 | 20,761 |
| Business and office, other | 1,153 | 266 | 887 | 2,409 | 575 | 1,834 | 14,082 | 4,731 | 9,351 |
| Marketing and distribution | 1,020 | 336 | 684 | 2,690 | 737 | 1,953 | 15,214 | 4,630 | 10,584 |
| Consumer and personal services | 830 | 281 | 549 | 4,026 | 503 | 3,523 | 790 | 393 | 397 |
| Communications | 59 | 38 | 21 | 115 | 63 | 52 | 1,881 | 1,012 | 869 |
| Communications technologies | 20 | 17 | 3 | 216 | 125 | 91 | 1,871 | 1,109 | 762 |
| Computer and information sciences | 960 | 539 | 421 | 2,327 | 1,162 | 1,165 | 12,824 | 6,492 | 6,332 |
| Education | 319 | 66 | 253 | 532 | 77 | 455 | 7,652 | 2,221 | 5,431 |
| Engineering | 125 | 122 | 3 | 521 | 486 | 35 | 4,459 | 3,980 | 479 |
| Engineering technologies | 4,887 | 4,286 | 601 | 32,353 | 30,550 | 1,803 | 57,735 | 52,776 | 4,959 |
| Mechanics and repairers | 2,492 | 2,160 | 332 | 14,811 | 14,223 | 588 | 9,253 | 8,789 | 464 |
| Construction trades | 627 | 606 | 21 | 4,062 | 3,855 | 207 | 2,179 | 2,102 | 77 |
| Engineering technologies, other | 1,768 | 1,520 | 248 | 13,480 | 12,472 | 1,008 | 46,303 | 41,885 | 4,418 |
| Foreign languages | 8 | 2 | 6 | 38 | 8 | 30 | 326 | 148 | 178 |
| Health sciences | 10,496 | 2,362 | 8,134 | 28,376 | 3,545 | 24,831 | 68,270 | 7,971 | 60,299 |
| Dental assisting | 222 | 0 | 222 | 3,037 | 160 | 2,877 | 4,389 | 373 | 4,016 |
| Emergency medical technician, ambulance | 2,027 | 1,279 | 748 | 718 | 440 | 278 | 139 | 78 | 61 |
| Emergency medical technician, paramedic | 706 | 438 | 268 | 579 | 441 | 138 | 186 | 125 | 61 |
| Medical lab technician | 43 | 8 | 35 | 85 | 21 | 64 | 3,037 | 545 | 2,492 |
| Medical assisting | 692 | 16 | 676 | 1,851 | 23 | 1,828 | 1,932 | 32 | 1,900 |
| Nursing assisting | 3,635 | 266 | 3,369 | 2,972 | 408 | 2,564 | 140 | 21 | 119 |
| Practical nursing | 1,130 | 96 | 1,034 | 12,910 | 705 | 12,205 | 1,389 | 96 | 1,293 |
| Nursing, general | 9 | 1 | 8 | 466 | 39 | 427 | 40,114 | 2,977 | 37,137 |
| Health sciences, other | 2,032 | 258 | 1,774 | 5,758 | 1,308 | 4,450 | 16,944 | 3,724 | 13,220 |
| Home economics | 1,106 | 338 | 768 | 3,991 | 825 | 3,166 | 9,247 | 2,420 | 6,827 |
| Law | 106 | 47 | 59 | 632 | 83 | 549 | 1,813 | 302 | 1,511 |
| Letters | 6 | 2 | 4 | 186 | 68 | 118 | 630 | 219 | 411 |
| Liberal/general studies | 159 | 86 | 73 | 1,273 | 723 | 550 | 108,019 | 48,557 | 59,462 |
| Library and archival sciences | 36 | 7 | 29 | 69 | 6 | 63 | 155 | 23 | 132 |
| Life sciences | 0 | 0 | 0 | 88 | 63 | 25 | 1,209 | 554 | 655 |
| Mathematics | 10 | 8 | 2 | 28 | 18 | 10 | 783 | 496 | 287 |
| Military sciences | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 83 | 4 |
| Multi-/interdisciplinary studies | 59 | 22 | 37 | 121 | 93 | 28 | 8,218 | 3,702 | 4,516 |
| Parks and recreation | 27 | 12 | 15 | 61 | 39 | 22 | 731 | 351 | 380 |
| Philosophy and religion | 2 | 0 | 2 | 12 | 7 | 5 | 144 | 95 | 49 |
| Theology | 193 | 99 | 94 | 677 | 365 | 312 | 712 | 403 | 309 |
| Physical sciences | 27 | 4 | 23 | 86 | 61 | 25 | 2,877 | 1,888 | 989 |
| Science technologies | 15 | 0 | 15 | 71 | 50 | 21 | 1,369 | 875 | 494 |
| Physical sciences, other | 12 | 4 | 8 | 15 | 11 | 4 | 1,508 | 1,013 | 495 |
| Psychology | 5 | 0 | 5 | 54 | 19 | 35 | 1,088 | 360 | 728 |
| Protective services | 1,910 | 1,624 | 286 | 1,661 | 1,296 | 365 | 11,983 | 8,931 | 3,052 |
| Criminal justice administration and studies | 731 | 562 | 169 | 444 | 322 | 122 | 5,666 | 3,978 | 1,688 |
| Law enforcement and security services | 440 | 401 | 39 | 641 | 491 | 150 | 4,019 | 3,000 | 1,019 |
| Fire control and safety | 467 | 434 | 33 | 380 | 356 | 24 | 1,671 | 1,612 | 59 |
| Protective services, other | 272 | 227 | 45 | 196 | 127 | 69 | 627 | 341 | 286 |
| Public affairs | 879 | 748 | 131 | 906 | 574 | 332 | 4,027 | 1,744 | 2,283 |
| Transportation and material moving | 834 | 732 | 102 | 558 | 440 | 118 | 1,601 | 1,242 | 359 |
| Public affairs, other | 45 | 16 | 29 | 348 | 134 | 214 | 2,426 | 502 | 1,924 |
| Social sciences | 13 | 3 | 10 | 8 | 4 | 4 | 2,734 | 1,174 | 1,560 |
| Visual and performing arts | 1,930 | 1,302 | 628 | 9,811 | 8,126 | 1,685 | 14,503 | 8,225 | 6,278 |
| Fine arts, general | 26 | 15 | 11 | 57 | 21 | 36 | 1,074 | 363 | 711 |
| Graphic arts technician | 364 | 27 | 337 | 181 | 51 | 130 | 1,972 | 513 | 1,459 |
| Precision production | 1,432 | 1,227 | 205 | 8,967 | 7,707 | 1,260 | 9,166 | 6,329 | 2,837 |
| Visual and performing arts, other | 108 | 33 | 75 | 606 | 347 | 259 | 2,291 | 1,020 | 1,271 |

NOTE.—Adjustments have been made to the data because of survey nonresponse. Data for 23 institutions have been imputed based on data for prior years. These imputed values represent about 1 percent of the total number of associate degrees.

SOURCE: U.S. Department of Education, Center for Education Statistics, Degrees and Other Formal Awards Conferred, 1983-84 survey. (This table was prepared September 1986.)

Source: Office for Civil Rights of the Department of Education

TABLE 7-25

ASSOCIATE DEGREE AWARDS BY MINORITY STATUS - 1985

| | Total | Men | %M | Women | %W |
|---|---|---|---|---|---|
| Am. Indian | 3,575 | 1,577 | 44.1 | 1,998 | 55.9 |
| Black | 47,158 | 18,025 | 38.2 | 29,133 | 61.8 |
| Asian | 9,290 | 5,139 | 55.3 | 4,151 | 44.7 |
| Hispanic | 17,443 | 8,092 | 46.4 | 9,351 | 53.6 |
| Sub Total | 77,466 | 32,833 | 42.4 | 44,633 | 57.6 |
| White | 395,144 | 177,384 | 44.9 | 217,760 | 55.1 |
| Non-Res Alien | 5,647 | 3,274 | 58.0 | 2,373 | 42.0 |
| Unknown | 133,955 | 62,544 | 46.7 | 71,411 | 53.3 |
| Total | 612,212 | 276,035 | 45.1 | 336,177 | 54.9 |

SOURCE: Engineering and Technology Degrees 1977-1986, Engineering Manpower Commission

TABLE 7-26

CERTIFICATES AWARDED IN ENGINEERING TECHNOLOGY BY SEX AND MINORITY GROUP, 1977-1986

| | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total | 614 | 661 | 430 | 533 | 509 | 402 | 526 | 575 | 497 | 943 |
| Women | 18 | 55 | 13 | 41 | 79 | 77 | 23 | 39 | 39 | 77 |
| Blacks | 21 | 16 | 27 | 96 | 22 | 30 | 49 | 21 | 51 | 58 |
| Hispanics | 2 | 12 | 14 | 24 | 8 | 11 | 10 | 10 | 6 | 54 |
| Asian/Pacific | 2 | 4 | 2 | 13 | 4 | 60 | 33 | 3 | 24 | 30 |
| American Indian | 10 | 10 | 2 | 4 | 6 | 1 | 6 | 1 | 2 | 6 |

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SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 8-1

### PHD AWARDS IN AGRICULTURAL SCIENCES BY SUBFIELD AND SEX, 1960-86

| | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| Fields | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL | 5560 | 60 | 1.1 | 9956 | 388 | 3.9 | 6853 | 687 | 10.0 | 2369 | 137 | 5.8 | 1157 | 139 | 12.0 |
| Agricultural Economics(7) | 90 | 0 | 0.0 | 1537 | 46 | 3.0 | 885 | 113 | 12.8 | 1258 | 192 | 15.3 | 158 | 16 | 10.1 |
| Animal breeding/genetics(1) | 1224 | 20 | 1.6 | 448 | 8 | 1.8 | 147 | 22 | 15.0 | 28 | 8 | 28.6 | 25 | 4 | 16.0 |
| Animal nutrition(2) | | | | | | | 205 | 26 | 12.7 | 78 | 13 | 16.7 | 65 | 13 | 20.0 |
| Animal sci/nutrition(2) | 1 | 1 | 100 | 880 | 52 | 5.9 | 401 | 47 | 11.7 | | | | | | |
| Animal sciences, other(2) | | | | | | | 277 | 37 | 13.4 | 95 | 13 | 13.7 | 91 | 16 | 17.6 |
| Agronomy | 1566 | 6 | 0.4 | 1494 | 40 | 2.7 | 931 | 83 | 8.9 | 158 | 19 | 12.0 | 159 | 15 | 9.4 |
| Plant breeding/genetics(5) | | | | | | | 237 | 35 | 14.8 | 88 | 14 | 15.9 | 78 | 13 | 16.7 |
| Plant pathology(5) | | | | | | | 238 | 51 | 21.4 | 89 | 24 | 27.0 | 85 | 14 | 16.5 |
| Phytopathology(5) | 871 | 29 | 3.3 | 943 | 72 | 7.6 | 331 | 62 | 18.7 | | | | | | |
| Plant sciences, other(5) | | | | | | | 57 | 6 | 10.5 | 21 | 3 | 14.3 | 22 | 5 | 22.7 |
| Food science | 39 | 1 | 2.6 | 921 | 162 | 17.6 | 706 | 185 | 26.2 | 136 | 33 | 24.3 | 121 | 40 | 33.1 |
| Soil sciences(6) | 40 | | 0.0 | 781 | 20 | 2.6 | 533 | 46 | 8.6 | 97 | 7 | 7.2 | 103 | 10 | 9.7 |
| Horticulture sciencs | 589 | 13 | 2.2 | 645 | 32 | 5.0 | 460 | 85 | 18.5 | 76 | 11 | 14.5 | 61 | 12 | 19.7 |
| Fisheries science(3) | | | | | | | 117 | 16 | 13.7 | 36 | 5 | 13.9 | 32 | 9 | 28.1 |
| Fish/wildlife(3) | 226 | 1 | 0.4 | 570 | 16 | 2.8 | 204 | 23 | 11.3 | | | | | | |
| Wildlife management(3) | | | | | | | 100 | 5 | 5.0 | 38 | 1 | 2.6 | 20 | 2 | 10.0 |
| Forestry science | 466 | 1 | 0.2 | 792 | 13 | 1.6 | 542 | 40 | 7.4 | 105 | 15 | 14.3 | 88 | 17 | 19.3 |
| Agriculture, general | 45 | 1 | 2.2 | 56 | 4 | 7.1 | 26 | 2 | 7.7 | 5 | | 0.0 | 4 | 0 | 0.0 |
| Agriculture, other | 403 | 8 | 2.0 | 889 | 29 | 3.3 | 456 | 48 | 10.5 | 61 | 5 | 8.2 | 45 | 2 | 4.4 |

(1) Called "Animal husbandry before 1983. (2) "Animal sciences" subfield introduced in 1972, name changed to "Animal science and animal nutrition" in 1977, split into two separate subfields in 1983. (3) "Fish and wildlife" split into to separate subfields in 1983. (4) Introduced as "Food science and technology" in 1969, name changed to "Food sciences in 1983. (5) Phytopathology" discontinued in 1983 and indicated subfields were introduced. (6) Called "Soils and soil science" before 1983. (7) Added in 1969.

SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 8-2

### PHD AWARDS IN THE BIOLOGICAL SCIENCES BY SUBFIELD AND SEX, 1960-86

| Fields | Year of Doctorate | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL | 19571 | 2858 | 14.6 | 35618 | 7543 | 21.2 | 22869 | 6953 | 30.4 | 3766 | 1229 | 32.6 | 3791 | 1276 | 33.7 |
| Biochemistry | 3976 | 714 | 18.0 | 6116 | 1328 | 21.7 | 3798 | 1112 | 29.3 | 579 | 184 | 31.8 | 571 | 194 | 34.0 |
| Biophysics | 602 | 50 | 8.3 | 1178 | 142 | 12.1 | 545 | 85 | 15.6 | 69 | 7 | 10.1 | 72 | 13 | 18.1 |
| Bacteriology(7) | | | | | | | 39 | 12 | 30.8 | 17 | 4 | 23.5 | 12 | 2 | 16.7 |
| Microbiology/bacteriology(7) | 2601 | 473 | 18.2 | 3703 | 932 | 25.2 | 1044 | 312 | 29.9 | | | | | | |
| Plant Genetics(4) | | | | | | | 70 | 17 | 24.3 | 31 | 8 | 25.8 | 19 | 10 | 52.6 |
| Genetics(4) | 1060 | 160 | 15.1 | 1424 | 390 | 27.4 | 490 | 182 | 37.1 | | | | | | |
| Plant Pathology(5) | | | | | | | 97 | 21 | 21.6 | 38 | 8 | 21.1 | 28 | 5 | 17.9 |
| Pathology(5) | 324 | 18 | 5.6 | 793 | 126 | 15.9 | 311 | 81 | 26.0 | | | | | | |
| Plant Physiology(6) | 554 | 53 | 9.6 | 702 | 111 | 15.8 | 371 | 92 | 24.8 | 58 | 12 | 20.7 | 51 | 17 | 33.3 |
| Hydrobiology | 95 | 4 | 4.2 | 155 | 14 | 9.0 | | | | | | | | | |
| Botany, other (1) | | | | | | | 362 | 111 | 30.7 | 120 | 34 | 28.3 | 121 | 42 | 34.7 |
| Botany(1) | 1384 | 193 | 13.9 | 1745 | 359 | 20.6 | 437 | 122 | 27.9 | | | | | | |
| Anatomy | 679 | 123 | 18.1 | 1349 | 323 | 23.9 | 805 | 272 | 33.8 | 133 | 44 | 33.1 | 85 | 27 | 31.8 |
| Biometrics/biostat | 177 | 24 | 13.6 | 406 | 85 | 20.9 | 283 | 95 | 33.6 | 40 | 12 | 30.0 | 30 | 10 | 33.3 |
| Cell Biology(2) | | | | | | | 361 | 128 | 37.5 | 100 | 39 | 39.0 | 130 | 44 | 33.8 |
| Hydrobiology | 95 | 4 | 4.2 | 155 | 14 | 9.0 | | | | | | | | | |
| Cytology(2) | 244 | 75 | 30.7 | 422 | 150 | 35.5 | 132 | 45 | 34.1 | | | | | | |
| Ecology | 477 | 18 | 3.8 | 1435 | 163 | 11.4 | 1125 | 264 | 23.5 | 200 | 52 | 26.0 | 183 | 40 | 21.9 |
| Embryology | 217 | 69 | 31.8 | 252 | 77 | 30.6 | 91 | 40 | 44.0 | 15 | 5 | 33.3 | 9 | 7 | 77.8 |
| Endocrinology(3) | | | | | | | 75 | 29 | 38.7 | 17 | 4 | 23.5 | 17 | 6 | 35.3 |
| Entomology | 1223 | 58 | 4.7 | 1726 | 115 | 6.7 | 944 | 145 | 15.4 | 173 | 34 | 19.7 | 170 | 22 | 12.9 |
| Immunology | | | | 630 | 196 | 31.1 | 832 | 330 | 39.7 | 121 | 53 | 43.8 | 146 | 51 | 34.9 |
| Molecular Biology | 91 | 19 | 20.9 | 1365 | 395 | 28.9 | 1371 | 484 | 35.3 | 277 | 95 | 34.3 | 297 | 114 | 38.4 |
| Microbiology(7) | | | | | | | 940 | 350 | 37.2 | 287 | 113 | 39.4 | 325 | 118 | 36.3 |
| Neurosciences | | | | | | | 552 | 188 | 34.1 | 156 | 58 | 37.2 | 120 | 39 | 32.5 |
| Nutritional Sciences(8) | 27 | 7 | 25.9 | 364 | 213 | 58.5 | 642 | 404 | 62.9 | 113 | 72 | 63.7 | 122 | 86 | 70.5 |
| Parasitology | | | | 133 | 21 | 15.8 | 114 | 20 | 17.5 | 21 | 2 | 9.5 | 25 | 3 | 12.0 |
| Toxicology(3) | | | | | | | 255 | 65 | 25.5 | 98 | 24 | 24.5 | 104 | 33 | 31.7 |
| Human/animal Genetics(4) | | | | | | | 282 | 131 | 46.5 | 105 | 49 | 46.7 | 91 | 41 | 45.1 |
| Human/animal Pathology(5) | | | | | | | 291 | 80 | 27.5 | 108 | 34 | 31.5 | 91 | 33 | 36.3 |
| Human/animal Pharmacology | 958 | 98 | 10.2 | 1852 | 295 | 15.9 | 1496 | 410 | 27.4 | 229 | 74 | 32.3 | 240 | 79 | 32.9 |
| Human/animal Physiology(6) | | | | | | | 721 | 195 | 27.0 | 239 | 68 | 28.5 | 238 | 76 | 31.9 |
| Animal Physiology(6) | 1628 | 242 | 14.9 | 3286 | 576 | 17.5 | 976 | 224 | 23.0 | | | | | | |
| Animal/plant Physiology(6) | 307 | 32 | 10.4 | | | | | | | | | | | | |
| Zoology,other(9) | | | | | | | 497 | 151 | 30.4 | 147 | 46 | 31.3 | 155 | 44 | 28.4 |
| Zoology(9) | 2242 | 311 | 13.9 | 2906 | 504 | 17.3 | 623 | 138 | 22.2 | | | | | | |
| Biological Sci, General | 230 | 46 | 20.0 | 1738 | 475 | 27.3 | 1164 | 361 | 31.0 | 191 | 62 | 32.5 | 213 | 73 | 34.3 |
| Biological Sci, Other | 380 | 67 | 17.6 | 1783 | 539 | 30.2 | 753 | 257 | 34.1 | 84 | 32 | 38.1 | 126 | 47 | 37.3 |

(1) Called "Botany" before 1983. (2) "Cytology" introduced in 1962, discontinued in 1983. "Cell biology" introduced in 1983. (3) Introduced in 1983. (4) "Genetics" split into "Plant genetics" and "Human and animal genitics in 1983. (5) "Pathology" split into "Plant pathology" and "Human and animal pathology" in 1983. (6) In 1962 "Animal and plant physiology" was split into "Animal physiology" and "Plant physiology." In 1983 "Animal physiology" was replaced by "Human and animal physiology." (7) Originally called "Microbiology." "Bacteriology" added in 1970. In 1963 they were split into separate subfields. (8) "Nutrition" discontinued in 1963. "Nutrition and dietetics" introduced in 1976, then replaced by "Nutritional sciences" in 1983. (9) "Zoology" discontinued in 1983 and Zoology, other" introduced.

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined By National Science Foundation

## TABLE 8-3

PhD DEGREES IN THE LIFE SCIENCES BY SEX AND SUBFIELD (1950 - 1986)

| | | Life Sciences Fields | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Agricultural | | | | | Biological | | | | | | | | |
| Year | Total Life Sci | Men | Women | %W | No. | %L | Men | Wom | %W | No. | %L | Men | Wom | %W |
| 1950 | 1033 | 938 | 95 | 9 | 368 | 36 | 364 | 4 | 1.1 | 665 | 64 | 574 | 91 | 14 |
| 1951 | 1192 | 1090 | 102 | 9 | 379 | 32 | 376 | 3 | 0.8 | 813 | 68 | 714 | 99 | 12 |
| 1952 | 1187 | 1093 | 94 | 8 | 412 | 35 | 402 | 10 | 2.4 | 775 | 65 | 691 | 84 | 11 |
| 1953 | 1443 | 1320 | 123 | 9 | 473 | 33 | 468 | 5 | 1.1 | 970 | 67 | 852 | 118 | 12 |
| 1954 | 1628 | 1517 | 111 | 7 | 515 | 32 | 508 | 7 | 1.4 | 1113 | 68 | 1009 | 104 | 9 |
| 1955 | 1505 | 1398 | 107 | 7 | 507 | 34 | 499 | 8 | 1.6 | 998 | 66 | 899 | 99 | 10 |
| 1956 | 1404 | 1281 | 123 | 9 | 379 | 27 | 373 | 6 | 1.6 | 1025 | 73 | 908 | 117 | 11 |
| 1957 | 1449 | 1327 | 122 | 8 | 341 | 24 | 331 | 10 | 2.9 | 1108 | 76 | 996 | 112 | 10 |
| 1958 | 1465 | 1321 | 144 | 10 | 340 | 23 | 334 | 6 | 1.8 | 1125 | 77 | 987 | 138 | 12 |
| 1959 | 1427 | 1307 | 120 | 8 | 376 | 26 | 368 | 8 | 2.1 | 1051 | 74 | 939 | 112 | 11 |
| 50-59 | 13,733 | 12,592 | 1,141 | 8 | 4,090 | 30 | 4,023 | 67 | 1.6 | 9,643 | 70 | 8,569 | 1,074 | 11 |
| 1960 | 1647 | 1521 | 126 | 8 | 440 | 27 | 433 | 7 | 1.6 | 1207 | 73 | 1088 | 119 | 10 |
| 1961 | 1646 | 1502 | 144 | 9 | 450 | 27 | 443 | 7 | 1.6 | 1196 | 73 | 1059 | 137 | 11 |
| 1962 | 1804 | 1643 | 161 | 9 | 465 | 26 | 463 | 2 | 0.4 | 1339 | 74 | 1180 | 159 | 12 |
| 1963 | 1908 | 1724 | 184 | 10 | 449 | 24 | 441 | 8 | 1.8 | 1459 | 76 | 1283 | 176 | 12 |
| 1964 | 2181 | 1978 | 203 | 9 | 555 | 25 | 545 | 10 | 1.8 | 1626 | 75 | 1433 | 193 | 12 |
| 1965 | 2474 | 2228 | 246 | 10 | 529 | 21 | 516 | 13 | 2.5 | 1945 | 79 | 1712 | 233 | 12 |
| 1966 | 2696 | 2382 | 314 | 12 | 588 | 22 | 581 | 7 | 1.2 | 2108 | 78 | 1801 | 307 | 15 |
| 1967 | 2900 | 2546 | 354 | 12 | 637 | 22 | 625 | 12 | 1.9 | 2263 | 78 | 1921 | 342 | 15 |
| 1968 | 3445 | 2993 | 452 | 13 | 648 | 19 | 636 | 12 | 1.9 | 2797 | 81 | 2357 | 440 | 16 |
| 1969 | 3779 | 3295 | 484 | 13 | 699 | 18 | 687 | 12 | 1.7 | 3080 | 82 | 2608 | 472 | 15 |
| 60-69 | 24,480 | 21,812 | 2,668 | 11 | 5,460 | 22 | 5,370 | 90 | 1.6 | 19,020 | 78 | 16,442 | 2,578 | 14 |
| 1970 | 4131 | 3632 | 499 | 12 | 823 | 20 | 795 | 28 | 3.4 | 3308 | 80 | 2837 | 471 | 14 |
| 1971 | 4534 | 3910 | 624 | 14 | 874 | 19 | 846 | 28 | 3.2 | 3660 | 81 | 3064 | 596 | 16 |
| 1972 | 4478 | 3831 | 647 | 14 | 805 | 18 | 783 | 22 | 2.7 | 3673 | 82 | 3048 | 625 | 17 |
| 1973 | 4524 | 3790 | 734 | 16 | 869 | 19 | 848 | 21 | 2.4 | 3655 | 81 | 2942 | 713 | 20 |
| 1974 | 4220 | 3488 | 732 | 17 | 765 | 18 | 736 | 29 | 3.8 | 3455 | 82 | 2752 | 703 | 20 |
| 1975 | 4252 | 3470 | 782 | 18 | 832 | 20 | 801 | 31 | 3.7 | 3420 | 80 | 2669 | 751 | 22 |
| 1976 | 4203 | 3412 | 791 | 19 | 768 | 18 | 714 | 54 | 7.0 | 3435 | 82 | 2698 | 737 | 21 |
| 1977 | 4199 | 3408 | 791 | 19 | 753 | 18 | 699 | 54 | 7.2 | 3446 | 82 | 2709 | 737 | 21 |
| 1978 | 4179 | 3307 | 872 | 21 | 810 | 19 | 755 | 55 | 6.8 | 3369 | 81 | 2552 | 817 | 24 |
| 1979 | 4403 | 3429 | 974 | 22 | 804 | 18 | 743 | 61 | 7.6 | 3599 | 82 | 2686 | 913 | 25 |
| 70-79 | 43,123 | 35,677 | 7,446 | 17 | 8,103 | 19 | 7,720 | 383 | 4.7 | 35,020 | 81 | 27,957 | 7,063 | 20 |
| 1980 | 4495 | 3445 | 1050 | 23 | 827 | 18 | 729 | 98 | 11.9 | 3668 | 82 | 2716 | 952 | 26 |
| 1981 | 4669 | 3501 | 1168 | 25 | 910 | 19 | 797 | 113 | 12.4 | 3759 | 81 | 2704 | 1055 | 28 |
| 1982 | 4693 | 3460 | 1233 | 26 | 919 | 20 | 788 | 131 | 14.3 | 3774 | 80 | 2672 | 1102 | 29 |
| 1983 | 4350 | 3146 | 1204 | 28 | 986 | 23 | 860 | 126 | 12.8 | 3364 | 77 | 2286 | 1078 | 32 |
| 1984 | 4448 | 3253 | 1195 | 27 | 1011 | 23 | 872 | 139 | 13.7 | 3437 | 77 | 2381 | 1056 | 31 |
| 1985 | 4489 | 3211 | 1278 | 28 | 1057 | 24 | 904 | 153 | 14.5 | 3432 | 76 | 2307 | 1125 | 33 |
| 1986 | 4352 | 3046 | 1306 | 30 | 994 | 23 | 817 | 177 | 17.8 | 3358 | 77 | 2229 | 1129 | 34 |
| 80-86 | 27,144 | 20,016 | 7,128 | 26 | 5,710 | 21 | 4,950 | 760 | 13.3 | 21,434 | 79 | 15,066 | 6,368 | 30 |
| TOTAL | 108,480 | 90,097 | 18,383 | 17 | 23,363 | 22 | 22,063 | 1,300 | 5.6 | 85,117 | 78 | 68,034 | 17,083 | 20 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 8-3 (continued)

MASTERS DEGREES IN THE LIFE SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| Year | Total Life Sci | Men | Women | %W | Life Sciences Fields: Agricultural No. | %L | Men | Women | %W | Biological No. | %L | Men | Women | %W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1950 | 4158 | 3624 | 534 | 13 | 1505 | 36 | 1492 | 13 | 0.9 | 2653 | 64 | 2132 | 521 | 19.6 |
| 1951 | 4417 | 3890 | 527 | 12 | 1568 | 35 | 1540 | 28 | 1.8 | 2849 | 65 | 2350 | 499 | 17.5 |
| 1952 | 4184 | 3717 | 467 | 11 | 1608 | 38 | 1578 | 30 | 1.9 | 2576 | 62 | 2139 | 437 | 17.0 |
| 1953 | 3568 | 3158 | 410 | 11 | 1470 | 41 | 1438 | 32 | 2.2 | 2098 | 59 | 1720 | 378 | 18.0 |
| 1954 | 3007 | 2649 | 358 | 12 | 1302 | 43 | 1279 | 23 | 1.8 | 1705 | 57 | 1370 | 335 | 19.6 |
| 1955 | 3090 | 2657 | 433 | 14 | 1364 | 44 | 1336 | 28 | 2.1 | 1726 | 56 | 1321 | 405 | 23.5 |
| 1956 | 2867 | 2461 | 406 | 14 | 1038 | 36 | 1021 | 17 | 1.6 | 1829 | 64 | 1440 | 389 | 21.3 |
| 1957 | 3019 | 2616 | 403 | 13 | 1122 | 37 | 1103 | 19 | 1.7 | 1897 | 63 | 1513 | 384 | 20.2 |
| 1958 | 3179 | 2721 | 458 | 14 | 1104 | 35 | 1089 | 15 | 1.4 | 2075 | 65 | 1632 | 443 | 21.3 |
| 1959 | 3537 | 2976 | 561 | 16 | 1183 | 33 | 1166 | 17 | 1.4 | 2354 | 67 | 1810 | 544 | 23.1 |
| 50-59 | 35,026 | 30,469 | 4,557 | 13 | 13,264 | 38 | 13,042 | 222 | 1.7 | 21,762 | 62 | 17,427 | 4,335 | 19.9 |
| 1960 | 3751 | 3178 | 573 | 15 | 1203 | 32 | 1190 | 13 | 1.1 | 2548 | 68 | 1988 | 560 | 22.0 |
| 1961 | 4085 | 3415 | 670 | 16 | 1241 | 30 | 1212 | 29 | 2.3 | 2844 | 70 | 2203 | 641 | 22.5 |
| 1962 | 4672 | 3887 | 785 | 17 | 1357 | 29 | 1321 | 36 | 2.7 | 3315 | 71 | 2566 | 749 | 22.6 |
| 1963 | 4718 | 3824 | 894 | 19 | 1261 | 27 | 1232 | 29 | 2.3 | 3457 | 73 | 2592 | 865 | 25.0 |
| 1964 | 5357 | 4273 | 1084 | 20 | 1344 | 25 | 1302 | 42 | 3.1 | 4013 | 75 | 2971 | 1042 | 26.0 |
| 1965 | 5978 | 4816 | 1162 | 19 | 1366 | 23 | 1330 | 36 | 2.6 | 4612 | 77 | 3486 | 1126 | 24.4 |
| 1966 | 6666 | 5286 | 1380 | 21 | 1666 | 25 | 1594 | 72 | 4.3 | 5000 | 75 | 3692 | 1308 | 26.2 |
| 1967 | 7465 | 5948 | 1517 | 20 | 1761 | 24 | 1687 | 74 | 4.2 | 5704 | 76 | 4261 | 1443 | 25.3 |
| 1968 | 8315 | 6451 | 1864 | 22 | 1807 | 22 | 1730 | 77 | 4.3 | 6508 | 78 | 4721 | 1787 | 27.5 |
| 1969 | 8809 | 6793 | 2016 | 23 | 2073 | 24 | 1974 | 99 | 4.8 | 6736 | 76 | 4819 | 1917 | 28.5 |
| 60-69 | 59,816 | 47,871 | 11,945 | 20 | 15,079 | 25 | 14,572 | 507 | 3.4 | 44,737 | 75 | 33,299 | 11,438 | 25.6 |
| 1970 | 8590 | 6374 | 2216 | 26 | 1807 | 21 | 1686 | 121 | 6.7 | 6783 | 79 | 4688 | 2095 | 30.9 |
| 1971 | 8320 | 6130 | 2190 | 26 | 2040 | 25 | 1910 | 130 | 6.4 | 6280 | 75 | 4220 | 2060 | 32.8 |
| 1972 | 8914 | 6587 | 2327 | 26 | 2280 | 26 | 2102 | 178 | 7.8 | 6634 | 74 | 4485 | 2149 | 32.4 |
| 1973 | 9080 | 6843 | 2237 | 25 | 2391 | 26 | 2188 | 203 | 8.5 | 6689 | 74 | 4655 | 2034 | 30.4 |
| 1974 | 9605 | 7195 | 2410 | 25 | 2524 | 26 | 2258 | 266 | 10.5 | 7081 | 74 | 4937 | 2144 | 30.3 |
| 1975 | 9618 | 7207 | 2411 | 25 | 2687 | 28 | 2349 | 338 | 12.6 | 6931 | 72 | 4858 | 2073 | 29.9 |
| 1976 | 9823 | 7204 | 2619 | 27 | 2884 | 29 | 2458 | 426 | 14.8 | 6939 | 71 | 4746 | 2193 | 31.6 |
| 1977 | 10707 | 7696 | 3011 | 28 | 3239 | 30 | 2740 | 499 | 15.4 | 7468 | 70 | 4956 | 2512 | 33.6 |
| 1978 | 10711 | 7485 | 3226 | 30 | 3484 | 33 | 2790 | 694 | 19.9 | 7227 | 67 | 4695 | 2532 | 35.0 |
| 1979 | 10719 | 7259 | 3460 | 32 | 3499 | 33 | 2749 | 750 | 21.4 | 7220 | 67 | 4510 | 2710 | 37.5 |
| 70-79 | 96,087 | 69,980 | 26,107 | 27 | 26,835 | 28 | 23,230 | 3,605 | 13.4 | 69,252 | 72 | 46,750 | 22,502 | 32.5 |
| 1980 | 10278 | 6952 | 3326 | 32 | 3424 | 33 | 2627 | 797 | 23.3 | 6854 | 67 | 4325 | 2529 | 36.9 |
| 1981 | 9682 | 6421 | 3261 | 34 | 3420 | 35 | 2589 | 831 | 24.3 | 6262 | 65 | 3832 | 2430 | 38.8 |
| 1982 | 9755 | 6283 | 3472 | 36 | 3628 | 37 | 2686 | 942 | 26.0 | 6127 | 63 | 3597 | 2530 | 41.3 |
| 1983 | 9654 | 6070 | 3584 | 37 | 3652 | 38 | 2669 | 983 | 26.9 | 6002 | 62 | 3401 | 2601 | 43.3 |
| 1984 | 8998 | 5544 | 3454 | 38 | 3592 | 40 | 2548 | 1044 | 29.1 | 5406 | 60 | 2996 | 2410 | 44.6 |
| 1985 | 8455 | 5088 | 3367 | 40 | 3396 | 40 | 2441 | 955 | 28.1 | 5059 | 60 | 2647 | 2412 | 47.7 |
| 1986 | 8263 | 4876 | 3387 | 41 | 3250 | 39 | 2260 | 990 | 30.5 | 5013 | 61 | 2616 | 2397 | 47.8 |
| 80-86 | 65,085 | 41,234 | 23,851 | 37 | 24,362 | 37 | 17,820 | 6,542 | 26.9 | 40,723 | 63 | 23,414 | 17,309 | 42.5 |
| TOTAL | 256,014 | 189,554 | 66,460 | 26 | 79,540 | 31 | 68,664 | 10,876 | 13.7 | 176,474 | 69 | 120,890 | 55,584 | 31.5 |

SOURCE: Earned Degrees Conferred Series, 1950-1986, National Center for Statistics, Redefined By National Science Foundation

## TABLE 8-3 (continued)

BACHELORS DEGREES IN THE LIFE SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | | Life Sciences Fields | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Agricultural | | | | | Biological | | | | |
| Year | Total Life Sci | Men | Women | %W | No. | %L | Men | Women | %W | No. | %L | Men | Women | %W |
| 1950 | 39101 | 34173 | 4928 | 12.6 | 14999 | 38 | 14837 | 162 | 1.1 | 24102 | 62 | 19336 | 4766 | 19.8 |
| 1951 | 32271 | 28018 | 4253 | 13.2 | 12165 | 38 | 12020 | 145 | 1.2 | 20106 | 62 | 15998 | 4108 | 20.4 |
| 1952 | 25231 | 21426 | 3805 | 15.1 | 9595 | 38 | 9451 | 144 | 1.5 | 15636 | 62 | 11975 | 3661 | 23.4 |
| 1953 | 21835 | 18360 | 3475 | 15.9 | 8825 | 40 | 8674 | 151 | 1.7 | 13010 | 60 | 9686 | 3324 | 25.5 |
| 1954 | 21584 | 18079 | 3505 | 16.2 | 7832 | 36 | 7687 | 145 | 1.9 | 13752 | 64 | 10392 | 3360 | 24.4 |
| 1955 | 19927 | 16677 | 3250 | 16.3 | 7170 | 36 | 7052 | 118 | 1.6 | 12757 | 64 | 9625 | 3132 | 24.6 |
| 1956 | 19890 | 16508 | 3382 | 17.0 | 6117 | 31 | 6002 | 115 | 1.9 | 13773 | 69 | 10506 | 3267 | 23.7 |
| 1957 | 21903 | 18327 | 3576 | 16.3 | 6619 | 30 | 6465 | 154 | 2.3 | 15284 | 70 | 11862 | 3422 | 22.4 |
| 1958 | 23069 | 19399 | 3670 | 15.9 | 6769 | 29 | 6677 | 92 | 1.4 | 16300 | 71 | 12722 | 3578 | 22.0 |
| 1959 | 23861 | 19734 | 4127 | 17.3 | 6767 | 28 | 6692 | 75 | 1.1 | 17094 | 72 | 13042 | 4052 | 23.7 |
| 50-59 | 248,672 | 210,701 | 37,971 | 15.3 | 86,858 | 35 | 85,557 | 1,301 | 1.5 | 161,814 | 65 | 125,144 | 36,670 | 22.7 |
| 1960 | 24141 | 19650 | 4491 | 18.6 | 6335 | 26 | 6242 | 93 | 1.5 | 17806 | 74 | 13408 | 4398 | 24.7 |
| 1961 | 23900 | 19078 | 4822 | 20.2 | 5717 | 24 | 5647 | 70 | 1.2 | 18183 | 76 | 13431 | 4752 | 26.1 |
| 1962 | 25200 | 19730 | 5470 | 21.7 | 5894 | 23 | 5804 | 90 | 1.5 | 19306 | 77 | 13926 | 5380 | 27.9 |
| 1963 | 27801 | 21627 | 6174 | 22.2 | 6063 | 22 | 5951 | 112 | 1.8 | 21738 | 78 | 15676 | 6062 | 27.9 |
| 1964 | 31611 | 24398 | 7213 | 22.8 | 6194 | 20 | 6069 | 125 | 2.0 | 25417 | 80 | 18329 | 7088 | 27.9 |
| 1965 | 34842 | 26565 | 8277 | 23.8 | 6770 | 19 | 6600 | 170 | 2.5 | 28072 | 81 | 19965 | 8107 | 28.9 |
| 1966 | 36864 | 28400 | 8464 | 23.0 | 7196 | 20 | 7042 | 154 | 2.1 | 29668 | 80 | 21358 | 8310 | 28.0 |
| 1967 | 39408 | 30460 | 8948 | 22.7 | 7889 | 20 | 7712 | 177 | 2.2 | 31519 | 80 | 22748 | 8771 | 27.8 |
| 1968 | 43260 | 33169 | 10091 | 23.3 | 8328 | 19 | 8060 | 268 | 3.2 | 34932 | 81 | 25109 | 9823 | 28.1 |
| 1969 | 48713 | 37405 | 11308 | 23.2 | 9995 | 21 | 9594 | 401 | 4.0 | 38718 | 79 | 27811 | 10907 | 28.2 |
| 60-69 | 335,740 | 260,482 | 75,258 | 22.4 | 70,381 | 21 | 68,721 | 1,660 | 2.4 | 265,359 | 79 | 191,761 | 73,598 | 27.7 |
| 1970 | 52129 | 40254 | 11875 | 22.8 | 11369 | 22 | 10872 | 497 | 4.4 | 40760 | 78 | 29382 | 11378 | 27.9 |
| 1971 | 51461 | 39658 | 11803 | 22.9 | 11531 | 22 | 11003 | 528 | 4.6 | 39930 | 78 | 28655 | 11275 | 28.2 |
| 1972 | 53484 | 40790 | 12694 | 23.7 | 12488 | 23 | 11761 | 727 | 5.8 | 40996 | 77 | 29029 | 11967 | 29.2 |
| 1973 | 59486 | 44916 | 14570 | 24.5 | 13838 | 23 | 12751 | 1087 | 7.9 | 45648 | 77 | 32165 | 13483 | 29.5 |
| 1974 | 68226 | 50390 | 17836 | 26.1 | 15125 | 22 | 13586 | 1539 | 10.2 | 53101 | 78 | 36804 | 16297 | 30.7 |
| 1975 | 72710 | 51899 | 20811 | 28.6 | 16531 | 23 | 14103 | 2428 | 14.7 | 56179 | 77 | 37796 | 18383 | 32.7 |
| 1976 | 77301 | 53512 | 23789 | 30.8 | 18289 | 24 | 14798 | 3491 | 19.1 | 59012 | 76 | 38714 | 20298 | 34.4 |
| 1977 | 78472 | 52863 | 25609 | 32.6 | 20199 | 26 | 15538 | 4661 | 23.1 | 58273 | 74 | 37325 | 20948 | 35.9 |
| 1978 | 77178 | 50184 | 26954 | 34.9 | 21027 | 27 | 15610 | 5417 | 25.8 | 56111 | 73 | 34574 | 21537 | 38.4 |
| 1979 | 75085 | 47537 | 27548 | 36.7 | 21631 | 29 | 15540 | 6091 | 28.2 | 53454 | 71 | 31997 | 21457 | 40.1 |
| 70-79 | 665,492 | 472,003 | 193,489 | 29.1 | 162,028 | 24 | 135,562 | 26,466 | 16.3 | 503,464 | 76 | 336,441 | 167,023 | 33.2 |
| 1980 | 71617 | 44021 | 27596 | 38.5 | 21121 | 29 | 14616 | 6505 | 30.8 | 50496 | 71 | 29405 | 21091 | 41.8 |
| 1981 | 66812 | 40046 | 26786 | 40.1 | 20025 | 30 | 13600 | 6425 | 32.1 | 46807 | 70 | 26446 | 20361 | 43.5 |
| 1982 | 63884 | 37602 | 26282 | 41.1 | 19120 | 30 | 12892 | 6228 | 32.6 | 44764 | 70 | 24710 | 20054 | 44.8 |
| 1983 | 62119 | 36182 | 25937 | 41.8 | 19063 | 31 | 12647 | 6416 | 33.7 | 43056 | 69 | 23535 | 19521 | 45.3 |
| 1984 | 55863 | 32097 | 23766 | 42.5 | 17223 | 31 | 11539 | 5684 | 33.0 | 38640 | 69 | 20558 | 18082 | 46.8 |
| 1985 | 54248 | 30747 | 23501 | 43.3 | 15803 | 29 | 10683 | 5120 | 32.4 | 38445 | 71 | 20064 | 18381 | 47.8 |
| 1986 | 53203 | 29889 | 23314 | 43.8 | 14679 | 28 | 9896 | 4783 | 32.6 | 38524 | 72 | 19993 | 18531 | 48.1 |
| 80-86 | 427,766 | 250,584 | 177,182 | 41.4 | 127,034 | 30 | 85,873 | 41,161 | 32.4 | 300,732 | 70 | 164,711 | 136,021 | 45.2 |
| TOTAL | 1,677,670 | 1,193,770 | 483,900 | 28.8 | 446,301 | 27 | 375,713 | 70,588 | 15.8 | 1,231,369 | 73 | 818,057 | 413,312 | 33.6 |

FIELD: Life Sciences

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report, NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council, 1981-1987

TABLE 8-4

NUMBER OF Ph.D. RECIPIENTS BY TYPE OF CITIZENSHIP, 1960-1986

| BIOSCIENCES YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship not Known |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 1,246 | 1,048 | 188 | 40 | 148 | 10 |
| 1961 | 1,244 | 1,020 | 208 | 35 | 173 | 16 |
| 1962 | 1,397 | 1,167 | 215 | 14 | 201 | 15 |
| 1963 | 1,510 | 1,252 | 246 | 37 | 209 | 12 |
| 1964 | 1,702 | 1,376 | 293 | 43 | 250 | 33 |
| 1965 | 1,963 | 1,583 | 360 | 53 | 307 | 20 |
| 1966 | 2,135 | 1,740 | 365 | 52 | 313 | 30 |
| 1967 | 2,361 | 1,947 | 378 | 80 | 298 | 36 |
| 1968 | 2,822 | 2,324 | 470 | 111 | 359 | 28 |
| 1969 | 3,084 | 2,586 | 463 | 123 | 340 | 35 |
| 1970 | 3,359 | 2,813 | 522 | 161 | 361 | 24 |
| 1971 | 3,652 | 3,063 | 511 | 199 | 312 | 78 |
| 1972 | 3,663 | 3,049 | 535 | 225 | 310 | 79 |
| 1973 | 3,731 | 3,085 | 570 | 251 | 319 | 76 |
| 1974 | 3,585 | 2,829 | 587 | 217 | 370 | 169 |
| 1975 | 3,636 | 3,024 | 532 | 202 | 330 | 80 |
| 1976 | 3,692 | 3,090 | 500 | 170 | 330 | 102 |
| 1977 | 3,484 | 2,909 | 479 | 160 | 319 | 96 |
| 1978 | 3,508 | 2,988 | 432 | 142 | 290 | 88 |
| 1979 | 3,640 | 3,119 | 429 | 132 | 297 | 92 |
| 1980 | 3,411 | 2,944 | 392 | 126 | 266 | 75 |
| 1981 | 3,397 | 2,948 | 363 | 111 | 252 | 86 |
| 1982 | 3,502 | 2,973 | 417 | 105 | 312 | 112 |
| 1983 | 3,732 | 3,202 | 437 | 115 | 322 | 93 |
| 1984 | 3,872 | 3,280 | 473 | 113 | 360 | 119 |
| 1985 | 3,766 | 3,126 | 531 | 109 | 422 | 109 |
| 1986 | 3,791 | 3,120 | 504 | 114 | 390 | 167 |
| AGRICULTURE SCIENCES | | | | | | |
| 1960 | 414 | 306 | 107 | 16 | 91 | 1 |
| 1961 | 438 | 338 | 98 | 6 | 92 | 2 |
| 1962 | 470 | 344 | 126 | 14 | 112 | |
| 1963 | 466 | 365 | 97 | 7 | 90 | 4 |
| 1964 | 517 | 366 | 149 | 14 | 135 | 2 |
| 1965 | 576 | 380 | 189 | 17 | 172 | 7 |
| 1966 | 576 | 379 | 186 | 11 | 175 | 11 |
| 1967 | 606 | 408 | 195 | 13 | 182 | 3 |
| 1968 | 681 | 450 | 225 | 29 | 196 | 6 |
| 1969 | 720 | 488 | 229 | 28 | 201 | 3 |
| 1970 | 804 | 564 | 237 | 38 | 199 | 3 |
| 1971 | 902 | 597 | 302 | 65 | 237 | 3 |
| 1972 | 853 | 533 | 316 | 85 | 231 | 4 |
| 1973 | 853 | 543 | 308 | 75 | 233 | 3 |
| 1974 | 820 | 461 | 336 | 65 | 271 | 23 |
| 1975 | 904 | 563 | 336 | 70 | 266 | 5 |
| 1976 | 788 | 491 | 281 | 37 | 244 | 8 |
| 1977 | 782 | 488 | 283 | 27 | 256 | 11 |
| 1978 | 853 | 531 | 310 | 43 | 267 | 12 |
| 1979 | 855 | 543 | 294 | 29 | 265 | 18 |
| 1980 | 1,072 | 666 | 391 | 42 | 349 | 15 |
| 1981 | 1,150 | 685 | 434 | 46 | 388 | 31 |
| 1982 | 1,130 | 741 | 364 | 32 | 332 | 25 |
| 1983 | 1,172 | 728 | 411 | 45 | 366 | 33 |
| 1984 | 1,155 | 698 | 427 | 44 | 383 | 30 |
| 1985 | 1,258 | 766 | 450 | 47 | 403 | 42 |
| 1986 | 1,157 | 657 | 434 | 54 | 380 | 66 |

FIELD: Biological/Agricultural Sciences

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, September 30, 1986

## TABLE 8-5

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN THE BIOLOGICAL/AGRICULTURAL SCIENCES
OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | ASIAN | | AM. INDIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | % | Women | % W | No. | % B | No. | % H | No. | % A | No. | % I | No. | % W |
| General Biological Sciences | 5,096 | 1,167 | 22.9 | 496 | 9.7 | 163 | 3.2 | 223 | 4.4 | 74 | 1.5 | 145 | 2.8 | 54 | 1.1 | 4,600 | 90.3 |
| Microbiology | 1,917 | 733 | 38.2 | 266 | 13.9 | 114 | 5.9 | 105 | 5.5 | 49 | 2.6 | 108 | 5.6 | 4 | 0.2 | 1,651 | 86.1 |
| Pharmacology | 480 | 106 | 22.1 | 95 | 19.8 | 26 | 5.4 | 24 | 5.0 | 9 | 1.9 | 61 | 12.7 | 1 | 0.2 | 385 | 80.2 |
| Agricultural Extension | 58 | 14 | 24.1 | 4 | 6.9 | 1 | 1.7 | 1 | 1.7 | 2 | 3.4 | 1 | 1.7 | | | 54 | 93.1 |
| Ecology | 360 | 67 | 18.6 | 11 | 3.1 | 1 | 0.3 | 4 | 1.1 | 5 | 1.4 | 1 | 0.3 | 1 | 0.3 | 349 | 96.9 |
| Zoology | 129 | 26 | 20.2 | 7 | 5.4 | 3 | 2.3 | 2 | 1.6 | 3 | 2.3 | 2 | 1.6 | | | 122 | 94.6 |
| Physiology | 549 | 114 | 20.8 | 57 | 10.4 | 11 | 2.0 | 14 | 2.6 | 10 | 1.8 | 32 | 5.8 | 1 | 0.2 | 492 | 89.6 |
| Entomology | 745 | 51 | 6.8 | 48 | 6.4 | 7 | 0.9 | 13 | 1.7 | 14 | 1.9 | 19 | 2.6 | 2 | 0.3 | 697 | 93.6 |
| Botany | 186 | 67 | 36.0 | 14 | 7.5 | 6 | 3.2 | 4 | 2.2 | 5 | 2.7 | 5 | 2.7 | | | 172 | 92.5 |
| Plant Pathology | 323 | 34 | 10.5 | 24 | 7.4 | 5 | 1.5 | 8 | 2.5 | 2 | 0.6 | 13 | 4.0 | 1 | 0.3 | 299 | 92.6 |
| Plant Physiology | 330 | 48 | 14.5 | 19 | 5.8 | 6 | 1.8 | 2 | 0.6 | 3 | 0.9 | 14 | 4.2 | | | 311 | 94.2 |
| Plant Protection & Quarantine | 1,254 | 193 | 15.4 | 367 | 29.3 | 70 | 5.6 | 51 | 4. | 176 | 14.0 | 135 | 10.8 | 5 | 0.4 | 887 | 70.7 |
| Horticulture | 115 | 21 | 18.3 | 10 | 8.7 | 1 | 0.9 | 4 | 3.5 | 2 | 1.7 | 4 | 3.5 | | | 105 | 91.3 |
| Genetics | 293 | 37 | 12.6 | 19 | 6.5 | 2 | 0.7 | 1 | 0.3 | 1 | 0.3 | 17 | 5.8 | | | 274 | 93.5 |
| Range Conservation | 1,212 | 119 | 9.8 | 88 | 7.3 | 7 | 0.6 | 1 | 0.1 | 64 | 5.3 | 3 | 0.2 | 20 | 1.7 | 1,124 | 92.7 |
| Soil Conservation | 4,596 | 299 | 6.5 | 521 | 11.3 | 5 | 0.3 | 293 | 6.4 | 117 | 2.5 | 24 | 0.5 | 87 | 1.9 | 4,075 | 88.7 |
| Forestry | 5,887 | 537 | 9.1 | 274 | 4.7 | 33 | 0.6 | 27 | 0.5 | 90 | 1.5 | 49 | 0.8 | 108 | 1.8 | 5,613 | 95.3 |
| Soil Science | 1,785 | 92 | 5.2 | 141 | 7.9 | 5 | 0.3 | 96 | 5.4 | 16 | 0.9 | 20 | 1.1 | 9 | 0.5 | 1,644 | 92.1 |
| Agronomy | 331 | 11 | 3.3 | 23 | 6.9 | 1 | 0.3 | 8 | 2.4 | 10 | 3.0 | 5 | 1.5 | | | 308 | 93.1 |
| Agricultural Management | 3,800 | 415 | 10.9 | 377 | 9.9 | 31 | 0.8 | 221 | 5.8 | 107 | 2.8 | 17 | 0.4 | 32 | 0.8 | 3,423 | 90.1 |
| General Fish & Wildlife Adm. | 177 | 3 | 1.7 | 4 | 2.3 | 0 | 0.0 | 2 | 1.1 | 1 | 0.6 | 1 | 0.6 | | | 173 | 97.7 |
| Fishery Biology | 1,409 | 143 | 10.1 | 106 | 7.5 | 15 | 1.1 | 32 | 2.3 | 18 | 1.3 | 39 | 2.8 | 17 | 1.2 | 1,303 | 92.5 |
| Wildlife Refuge Management | 564 | 46 | 8.2 | 28 | 5.0 | 5 | 0.9 | 6 | 1.1 | 12 | 2.1 | 3 | 0.5 | 7 | 1.2 | 536 | 95.0 |
| Wildlife Biology | 1,463 | 209 | 14.3 | 81 | 5.5 | 13 | 0.9 | 12 | 0.8 | 30 | 2.1 | 19 | 1.3 | 20 | 1.4 | 1,382 | 94.5 |
| Animal Science | 113 | 8 | 7.1 | 3 | 2.7 | | | 2 | 1.8 | | | 1 | 1.9 | | | 110 | 97.3 |

FIELD: Health Sciences

SOURCE: Doctorates Awarded from 1920 to 1971 by Subfield of Doctorate, Sex and Decade, March 1973, and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 8-6

### DOCTORATES AWARDED IN THE HEALTH SCIENCES FROM 1920 TO 1986 BY SUBFIELD OF DOCTORATE AND SEX

| | CY 1920-FY 1972 | | | FY 1973-FY 1982 | | | FY 1983-FY 1984 | | | FY 1985 | | | FY 1986 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUBFIELD | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W |
| HEALTH SCIENCES SUBTOTAL | 6,761 | 788 | 11.7 | 7,484 | 2,169 | 29.0 | 1,354 | 748 | 55.2 | 724 | 434 | 59.9 | 772 | 479 | 62.0 |
| Audiology & Speech Pathology (1) | 504 | 127 | 25.2 | 1,376 | 427 | 31.0 | 217 | 138 | 63.6 | 99 | 60 | 60.6 | 82 | 59 | 72.0 |
| Environmental Health (3) | | | | 192 | 41 | 21.4 | 78 | 19 | 24.4 | 31 | 13 | 41.9 | 39 | 12 | 30.8 |
| Dentistry (2) | 24 | 1 | 4.2 | | | | | | | | | | | | |
| Public Health | | | | | | | 103 | 64 | 62.1 | 102 | 57 | 55.9 | 103 | 63 | 61.2 |
| Epidemology | | | | | | | 179 | 103 | 57.5 | 76 | 48 | 63.2 | 81 | 51 | 63.0 |
| Public Health & Epidemiology (5) | 1,163 | 192 | 16.5 | 1,177 | 479 | 40.7 | | | | | | | | | |
| Nursing (3) | | | | 354 | 339 | 95.8 | 286 | 272 | 95.1 | 177 | 170 | 96.0 | 215 | 213 | 99.1 |
| Pharmacy | 852 | 47 | 5.5 | 676 | 83 | 12.3 | 183 | 47 | 25.7 | 106 | 28 | 26.4 | 106 | 25 | 23.6 |
| Hospital Administration (4) | 68 | 4 | 5.9 | 26 | 1 | 3.8 | | | | | | | | | |
| Optometry, Ophthalmology (2) | 35 | 2 | 5.7 | | | | | | | | | | | | |
| Pharmacology | 2,239 | 223 | 10.0 | 2,148 | 437 | 20.3 | | | | | | | | | |
| Medicine & Surgery (6) | 637 | 35 | 5.5 | 24 | 0 | 0.0 | | | | | | | | | |
| Veterinary Medicine | 497 | 6 | 1.2 | 340 | 37 | 10.9 | 91 | 19 | 20.9 | 51 | 17 | 33.3 | 41 | 13 | 31.7 |
| Health Sciences, General (7) | 89 | 12 | 13.5 | 223 | 46 | 20.6 | 33 | 9 | 27.3 | 14 | 5 | 35.7 | 28 | 8 | 28.6 |
| Health Sciences, Other (7,8) | 653 | 139 | 21.3 | 948 | 279 | 29.4 | 184 | 77 | 41.8 | 68 | 36 | 52.9 | 77 | 35 | 45.5 |

(1) Added in 1968 as "Speech & Hearing Sciences." Name changed to "Health Sciences: in 1983. (2) Dropped in 1961. Now included in "Health Sciences, Other." (3) Added in 1978. (4) Dropped in 1978. Now included in "Health Sciences, Other." (5) "Epidemiology" added in 1977. Two fields broken out in 1983. (6) Dropped as a separate field in 1977. (7) Added in 1962 as "Medical Sciences..." Name changed to "Health Sciences" in 1983. (8) Included "Psychiatry" which was dropped as a separate field in 1962.

FIELD: Medicine

SOURCE: Women in Engineering, Medicine and Science, by Vera Kistiakowsky, The Conference on Women in Science and Engineering, National Research Council, June 11-12, 1973; and Journal of the American Medical Association, Vol. 234, No. 13, December 1975; Vol. 243, No. 9, March 1980; and Vol. 246, No. 25, December 1981; copyright by AMA; and Office of Minority Affairs, Association of American Medical Colleges, 1985

## TABLE 8-7

ENROLLMENTS AND GRADUATES IN UNITED STATES MEDICAL SCHOOLS FOR SELECTED YEARS, BY SEX

| YEAR | No. of U.S. Med. Schools | Total Enrollment | Women Students | | Total M.D. Grads. | Women Graduates | |
|---|---|---|---|---|---|---|---|
| | | | No. | % of Total | | No. | % of Total |
| 1914-15 | 96 | 14,891 | 583 | 4.2 | 3,536 | 92 | 2.6 |
| 1924-25 | 80 | 18,200 | 910 | 5.0 | 3,974 | 204 | 5.1 |
| 1934-35 | 77 | 22,888 | 1,077 | 4.7 | 5,101 | 207 | 4.1 |
| 1954-55 | 81 | 28,583 | 1,537 | 5.4 | 6,977 | 345 | 4.9 |
| 1964-65 | 88 | 32,428 | 2,503 | 7.7 | 7,409 | 503 | 6.8 |
| 1974-75 | 114 | 53,554 | 9,661 | 18.0 | 12,714 | 1,706 | 13.4 |
| 1979-80 | 126 | 63,800 | 16,315 | 25.4 | 15,135 | 3,497 | 23.1 |
| 1984-85 | 127 | 67,016 | 21,316 | 31.8 | 16,318 | 4,904 | 30.1 |

SOURCE: Journal of the American Medical Association, Vol. 238, No. 26, December 26, 1977; Vol. 243, No. 9, March 1980; Vol. 246, No. 25, December 25, 1981; Vol. 248, No. 24, December 24-31, 1982; "Medical School Enrollments, 1973-74 thru 1977-78"; "Undergraduate Medical Education," Vol. 250, No. 12, September 23-30, 1983; Journal of Medical Education, Vol. 53, April 1978; and personal communications with the Association of American Medical Colleges

## TABLE 8-8

APPLICANTS, FIRST YEAR, AND TOTAL ENROLLMENTS AND GRADUATES IN UNITED STATES MEDICAL SCHOOLS BY SEX, 1968-69 - 1986-87

| YEAR | APPLICANTS | | | FIRST-YEAR ENROLLMENT | | | TOTAL ENROLLMENT | | | GRADUATES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| 1968-69 | 21,118 | 2,097 | 9.9 | 9,863 | 887 | 9.0 | 35,835 | 3,1365 | 8.8 | 8,049 | 607 | 7.5 |
| 1969-70 | 24,465 | 2,289 | 9.4 | 10,401 | 952 | 9.2 | 37,669 | 3,390 | 9.0 | 8,367 | 700 | 8.4 |
| 1970-71 | 24,987 | 2,734 | 10.9 | 11,348 | 1,256 | 11.1 | 40,487 | 3,894 | 9.6 | 8,974 | 827 | 9.2 |
| 1971-72 | 29,172 | 3,737 | 12.8 | 12,261 | 1,693 | 13.7 | 43,650 | 4,755 | 10.9 | 8,591 | 860 | 9.0 |
| 1972-73 | 36,135 | 5,480 | 15.2 | 13,726 | 2,315 | 16.9 | 47,546 | 6,099 | 12.8 | 10,391 | 924 | 8.9 |
| 1973-74 | 40,506 | 7,202 | 17.8 | 14,185 | 2,743 | 19.6 | 45,886 | 7,731 | 15.4 | 11,613 | 1,264 | 11.1 |
| 1974-75 | 42,624 | 8,712 | 20.4 | 14,963 | 3,260 | 22.3 | 54,074 | 9,786 | 18.1 | 12,714 | 1,706 | 13.4 |
| 1975-76 | 42,303 | 9,575 | 22.6 | 15,351 | 3,656 | 23.8 | 56,244 | 11,527 | 20.5 | 13,561 | 2,200 | 16.2 |
| 1976-77 | 42,155 | 10,244 | 24.3 | 15,667 | 3,876 | 24.7 | 58,266 | 13,059 | 22.4 | 13,607 | 2,611 | 19.2 |
| 1977-78 | 40,569 | 10,195 | 25.1 | 16,136 | 4,130 | 25.6 | 60,039 | 14,218 | 23.7 | 14,593 | 3,086 | 21.4 |
| 1978-79 | 36,636 | 9,561 | 26.1 | 16,620 | 4,184 | 25.2 | 62,213 | 15,293 | 24.4 | 14,966 | 3,445 | 23.0 |
| 1979-80 | 36,141 | 10,222 | 28.3 | 16,886 | 4,748 | 27.9 | 63,800 | 16,315 | 25.4 | 15,135 | 3,497 | 23.1 |
| 1980-81 | 36,100 | 10,644 | 29.5 | 17,204 | 4,970 | 28.9 | 65,497 | 17,373 | 26.5 | 15,667 | 3,892 | 24.8 |
| 1981-82 | 36,727 | 11,673 | 31.8 | 17,320 | 5,343 | 30.8 | 66,485 | 18,555 | 27.9 | 15,985 | 3,991 | 25.0 |
| 1982-83 | 35,730 | 11,685 | 32.7 | 17,230 | 5,445 | 31.6 | 66,886 | 19,627 | 29.3 | 15,728 | 4,193 | 26.7 |
| 1983-84 | 35,200 | 11,961 | 34.0 | 17,150 | 5,653 | 33.0 | 67,327 | 20,635 | 30.6 | 16,343 | 4,632 | 28.3 |
| 1984-85 | 35,944 | 12,476 | 34.7 | 16,997 | 5,718 | 33.6 | 67,016 | 21,316 | 31.8 | 16,318 | 4,904 | 30.1 |
| 1985-86 | 32,893 | 11,562 | 35.1 | 16,963 | 5,800 | 34.2 | 66,585 | 21,650 | 33.5 | 16,117 | 4,957 | 30.8 |
| 1986-87 | 31,323 | 11,267 | 36.0 | 16,819 | 5,894 | 35.0 | 66,125 | 22,100 | 33.4 | 15,830 | 5,107 | 2.3 |

FIELD: Medicine

SOURCE: Journal of the American Medical Association, Vol. 234, No. 13, Dec. 29, 1975, Vol. 238, No. 26, Dec. 26, 1977, Vol. 240, No. 26, Dec. 22, 1978, Vol. 243, No. 9, March 1980, Vol. 246, No. 25, Dec. 25, 1981, Vol. 248, No. 24, Dec. 24, 1982, Vol. 250, No. 12, September 23, 1983. Copyright by A.M.A. Fact sheets dated 2/28/85 and 10/18/85, and Minority Students In Medical Education: Facts and Figures III, Association of American Medical Colleges, March 1987.

## TABLE 8-9

### MINORITY GRADUATES IN MEDICINE, SELECTED YEARS, 1969-70 - 1985-86

| YEAR | | Black | | Am. Indian/ Alaskan Nat. | | Mexican American | | Puerto Rican | | Asian/ Pacific Isl. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total No. | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1969-70 | 8,367 | 165 | 2.0 | 4 | 0.05 | 10 | 0.1 | 9 | 0.1 | | |
| 1972-73 | 10,391 | 341 | 3.3 | 8 | 0.08 | 39 | 0.4 | 10 | 0.1 | | |
| 1974-75 | 12,714 | 638 | 5.0 | 22 | 0.2 | 110 | 0.9 | 28 | 0.2 | | |
| 1976-77 | 13,607 | 752 | 5.5 | 29 | 0.2 | 144 | 1.1 | 38 | 0.3 | | |
| 1977-78 | 14,393 | 793 | 5.5 | 47 | 0.3 | 172 | 1.2 | 176 | 1.2 | 319 | 2.2 |
| 1978-79 | 14,966 | 774 | 5.2 | 49 | 0.3 | 194 | 1.3 | 190 | 1.3 | 350 | 2.4 |
| 1980-81 | 15,667 | 773 | 4.9 | 43 | 0.3 | 201 | 1.3 | 223 | 1.4 | 414 | 2.7 |
| 1981-82 | 15,985 | 763 | 5.0 | 45 | 0.3 | 225 | 1.4 | 222 | 1.4 | 459 | 2.9 |
| 1982-83 | 15,802 | 883 | 5.6 | 45 | 0.3 | 228 | 1.4 | 289 | 1.8 | 483 | 3.1 |
| **1983-84** | **16,343** | **818** | **5.0** | **59** | **0.4** | **220** | **1.3** | **302** | **1.8** | **679** | **4.2** |
| Women | 4,632 | 378 | 2.3 | 20 | 0.1 | 59 | 0.4 | 100 | 0.6 | 217 | 1.3 |
| Men | 11,711 | 440 | 2.7 | 39 | 0.2 | 161 | 1.0 | 202 | 1.2 | 462 | 2.8 |
| **1984-85** | **16,318** | **837** | **5.1** | **65** | **0.4** | **242** | **1.5** | **318** | **1.9** | **750** | **4.6** |
| Women | 4,904 | 378 | 2.3 | 18 | 0.1 | 77 | 0.5 | 97 | 0.6 | 238 | 1.4 |
| Men | 11,414 | 456 | 2.8 | 47 | 0.3 | 165 | 1.0 | 221 | 1.4 | 512 | 3.1 |
| **1985-86** | **16,117** | **824** | **5.1** | **49** | **0.3** | **233** | **1.4** | **89** | **0.6** | **909** | **5.6** |
| Women | 4,957 | 350 | 2.2 | 15 | 0.1 | 72 | 0.4 | 37 | 0.2 | 295 | 1.8 |
| Men | 11,160 | 474 | 2.9 | 34 | 0.2 | 161 | 1.0 | 52 | 0.3 | 614 | 3.8 |

FIELD: Medicine

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, May 1974; and Minority Students in Medical Education: Facts and Figures III, Association of American Medical Colleges Office of Minority Affairs, 1987

## TABLE 8-10

FIRST YEAR AND TOTAL ENROLLMENT IN MEDICAL SCHOOLS BY MINORITY GROUP AND SEX FOR SELECTED YEARS, 1971-72 - 1986-87

FIRST YEAR

| YEAR | Total | Women | %W | Black | | | | American Indian | | | | Mexican American | | | | Main.and Puerto Rican | | | | Other Hispanic | | | | Asian/Pacific Is | | | | Total Minority | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | No. | %E | Women | %W | No. | %AI | Women | %W | No. | %MA | Women | %W | No. | %PR | Women | %W | No. | %H | Women | %W | No. | %PI | Women | %W | No. | %M | Women | %W |
| 1971-72 | 12361 | 1693 | 13.7 | 882 | 7.1 | 200 | 22.6 | 23 | 0.2 | 8 | 34.8 | 118 | 1.0 | 10 | 8.5 | 40 | 0.3 | 6 | 15.0 | | | | | 217 | 1.8 | 42 | 19.4 | 1280 | 10.3 | 266 | 20.8 |
| 1974-75 | 14760 | 3260 | 22.1 | 1106 | 7.5 | | | 72 | 0.5 | | | 227 | 1.5 | | | 69 | 0.5 | | | | | | | 275 | 1.9 | | | 1748 | 11.8 | | |
| 1975-76 | 15295 | 3647 | 23.8 | 1036 | 6.8 | 376 | 36.2 | 60 | 0.4 | 21 | 35.0 | 224 | 1.5 | 46 | 20.5 | 71 | 0.5 | 24 | 33.8 | 41 | 0.3 | 9 | 22.0 | 282 | 1.8 | 86 | 30.5 | 1714 | 11.2 | 562 | 32.8 |
| 1976-77 | 15613 | 3876 | 24.8 | 1040 | 6.7 | | | 43 | 0.3 | | | 245 | 1.6 | | | 72 | 0.5 | | | | | | | 348 | 2.2 | | | 1748 | 11.1 | | |
| 1977-78 | 16136 | 4130 | 25.6 | 1085 | 6.7 | 443 | 40.8 | 51 | 0.3 | 15 | 29.4 | 246 | 1.5 | 66 | 26.8 | 68 | 0.4 | 23 | 33.8 | 157 | 1.0 | 43 | 27.4 | 395 | 2.4 | 115 | 29.1 | 2002 | 12.4 | 705 | 35.2 |
| 1978-79 | 16501 | 4173 | 25.3 | 1061 | 6.4 | 446 | 42.0 | 47 | 0.3 | 12 | 25.5 | 260 | 1.6 | 66 | 25.4 | 75 | 0.5 | 32 | 42.7 | | | | | 452 | 2.7 | | | 1895 | 11.4 | 556 | 29.3 |
| 1979-80 | 16930 | 4713 | 27.8 | 1108 | 6.5 | 495 | 44.6 | 63 | 0.4 | 16 | 25.4 | 290 | 1.7 | 74 | 25.5 | 86 | 0.5 | 30 | 34.9 | 188 | 1.1 | 59 | 31.4 | 502 | 3.0 | 154 | 30.7 | 2237 | 13.2 | 828 | 37.0 |
| 1980-81 | 17186 | 4996 | 29.1 | 1128 | 6.6 | 513 | 45.4 | 67 | 0.4 | 24 | 35.8 | 268 | 1.5 | 79 | 32.6 | 95 | 0.6 | 41 | 43.2 | 234 | 1.3 | | | 572 | 3.3 | | | 2344 | 13.6 | 657 | 28.0 |
| 1981-82 | 17268 | 5317 | 30.8 | 1196 | 6.9 | 517 | 43.2 | 70 | 0.4 | 19 | 27.1 | 300 | 1.7 | 91 | 30.3 | 105 | 0.6 | 46 | 43.8 | 247 | 1.4 | | | 765 | 4.4 | | | 2683 | 15.5 | 673 | 25.1 |
| 1982-83 | 17254 | 5462 | 31.7 | 1145 | 6.6 | 495 | 43.2 | 62 | 0.4 | 26 | 41.9 | 305 | 1.8 | 91 | 29.8 | 114 | 0.7 | 41 | 36.0 | 278 | 1.6 | | | 936 | 5.4 | | | 2840 | 16.4 | 653 | 23.0 |
| 1983-84 | 17150 | 5653 | 33.0 | 1173 | 6.8 | 544 | 46.3 | 75 | 0.4 | 38 | 50.7 | 301 | 1.8 | 102 | 33.9 | 109 | 0.6 | 44 | 40.4 | 248 | 1.4 | 76 | 30.6 | 982 | 5.7 | 337 | 34.3 | 2889 | 16.8 | 1141 | 39.5 |
| 1984-85 | 16997 | 5715 | 33.6 | 1148 | 6.8 | 563 | 49.0 | 77 | 0.5 | 27 | 35.1 | 329 | 1.9 | 93 | 28.3 | 118 | 0.7 | 48 | 40.7 | 243 | 1.4 | 79 | 32.5 | 1124 | 6.6 | | | 3039 | 17.8 | 810 | 26.7 |
| 1985-86 | 16963 | 5800 | 34.2 | 1117 | 6.6 | 582 | 52.1 | 60 | 0.4 | 30 | 50.0 | 331 | 2.0 | 17 | 35.3 | 136 | 0.8 | 51 | 37.5 | 259 | 1.5 | | | 1295 | 7.6 | 441 | 34.1 | 3198 | 18.8 | 1221 | 38.2 |
| 1986-87 | 16819 | 5894 | 35.0 | 1174 | 7.0 | 600 | 51.1 | 61 | 0.4 | 25 | 41.0 | 331 | 2.0 | 121 | 36.6 | 111 | 0.7 | 45 | 40.5 | 276 | 1.6 | | | 1514 | 9.0 | | | 3467 | 20.6 | 791 | 22.8 |

TOTAL

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971-72 | 43650 | 4755 | 10.9 | 2055 | 4.7 | 420 | 20.4 | 42 | 0.1 | 10 | 23.8 | 262 | 0.6 | 24 | 9.5 | 76 | 0.2 | 13 | 17.1 | | | | | 647 | 1.5 | 116 | 17.9 | 3072 | 7.03 | 583 | 19.0 |
| 1974-75 | 53554 | 9786 | 18.3 | 3355 | 6.3 | | | 157 | 0.3 | | | 638 | 1.2 | | | 172 | 0.3 | | | | | | | 959 | 1.8 | | | 5281 | 9.86 | | |
| 1975-76 | 55818 | 11417 | 20.5 | 3456 | 6.2 | 1157 | 33.4 | 172 | 0.3 | 45 | 26.2 | 699 | 1.3 | 129 | 18.5 | 197 | 0.4 | 51 | 25.9 | 144 | 0.3 | 35 | 24.3 | 1022 | 1.8 | 256 | 25.0 | 5690 | 10.1 | 1673 | 29.4 |
| 1976-77 | 57765 | 13059 | 22.6 | 3517 | 6.1 | | | 186 | 0.3 | | | 780 | 1.4 | | | 232 | 0.4 | | | | | | | 1177 | 2.0 | | | 5892 | 10.1 | | |
| 1977-78 | 60039 | 14218 | 23.7 | 3587 | 6.0 | 1371 | 38.2 | 201 | 0.3 | 55 | 27.4 | 831 | 1.4 | 189 | 22.7 | 261 | 0.4 | 89 | 34.1 | 426 | 0.7 | 99 | 23.2 | 1422 | 2.4 | 417 | 29.3 | 6728 | 11.2 | 2220 | 33.0 |
| 1978-79 | 62213 | 15293 | 24.6 | 3537 | 5.7 | | | 202 | 0.3 | | | 882 | 1.4 | | | 277 | 0.4 | | | | | | | 1592 | 2.6 | | | 6490 | 10.4 | | |
| 1979-80 | 63800 | 16141 | 25.3 | 3627 | 5.7 | 1549 | 42.7 | 212 | 0.3 | 55 | 25.9 | 964 | 1.5 | 229 | 23.8 | 283 | 0.4 | 104 | 36.7 | 587 | 0.9 | 160 | 28.2 | 1777 | 2.8 | 518 | 29.2 | 7430 | 11.6 | 2615 | 35.2 |
| 1980-81 | 65189 | 17373 | 26.7 | 3708 | 5.7 | | | 221 | 0.3 | | | 951 | 1.5 | | | 329 | 0.5 | | | 683 | 1.0 | | | 1924 | 3.0 | | | 7816 | 11.9 | | |
| 1981-82 | 66298 | 18555 | 28.0 | 3684 | 5.9 | | | 229 | 0.3 | | | 1040 | 1.6 | | | 350 | 0.5 | | | 847 | 1.3 | | | 2518 | 3.8 | | | 8868 | 13.3 | | |
| 1982-83 | 66748 | 19627 | 29.4 | 3869 | 5.8 | | | 235 | 0.4 | | | 1071 | 1.6 | | | 369 | 0.6 | | | 962 | 1.4 | | | 2936 | 4.4 | | | 9442 | 14.1 | | |
| 1983-84 | 67327 | 20635 | 30.6 | 3892 | 5.8 | 1748 | 44.9 | 258 | 0.4 | 95 | 36.8 | 1082 | 1.6 | 352 | 32.5 | 368 | 0.5 | 143 | 38.9 | 980 | 1.5 | 285 | 29.0 | 3290 | 4.9 | 1101 | 33.5 | 9873 | 14.6 | 3724 | 37.7 |
| 1984-85 | 67016 | 21316 | 31.8 | 3944 | 5.9 | | | 257 | 0.4 | | | 1126 | 1.7 | | | 380 | 0.6 | | | 987 | 1.5 | | | 3763 | 5.6 | | | 10457 | 15.6 | | |
| 1985-86 | 66585 | 21350 | 32.1 | 3849 | 5.8 | 1796 | 46.6 | 235 | 0.4 | 95 | 40.4 | 1143 | 1.7 | 366 | 32.0 | 428 | 0.6 | 162 | 37.9 | 991 | 1.5 | 312 | 31.5 | 4289 | 6.4 | 316 | 7.4 | 10935 | 16.4 | 3047 | 27.9 |
| 1986-87 | 66125 | 22100 | 33.4 | 3892 | 5.9 | | | 242 | 0.4 | | | 1153 | 1.7 | | | 439 | 0.7 | | | 1056 | 1.6 | | | 4883 | 7.4 | | | 11620 | 17.5 | | |

FIELD: Medicine

SOURCE: Journal of the American Medical Association, v. 234, No. 13, Dec. 29, 1975; v. 238, No. 26, Dec. 26, 1977; v. 240, No. 26, Dec. 22, 1978; Minority Students in Medical Education: Facts and Figures III, Assoc. of American Medical Colleges, March 1987.

## TABLE 8-11

STUDENTS REPEATING THE ACADEMIC YEAR BY RACIAL/ETHNIC GROUP 1973-74 - 1985-86

| YEAR | Total Minority | | | Black Americans | | | American Indian | | | Mexican Amer | | | Puerto Rican | | | Other Hispanic | | | Asian/Pacific Is | | | All Other Student | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Rep | % | Total | Rep | % | Total | Rep | % | Total | Rep | % | Total | Rep | % | Total | Rep | % | Total | Rep | % | Total | Rep | % |
| 1973-74 | 1270 | 144 | 11.3 | 995 | 120 | 12.1 | 41 | 8 | 19.5 | 178 | 8 | 4.5 | 56 | 8 | 14.3 | | | | | | | 12642 | 142 | 1.1 |
| 1974-75 | 1491 | 202 | 13.5 | 1117 | 161 | 14.4 | 72 | 2 | 2.8 | 231 | 32 | 13.9 | 71 | 7 | 9.9 | | | | | | | 13472 | 162 | 1.2 |
| 1975-76 | 1419 | 192 | 13.5 | 1052 | 159 | 15.1 | 61 | 4 | 6.6 | 228 | 21 | 9.2 | 78 | 8 | 10.3 | | | | | | | 13808 | 157 | 1.1 |
| 1976-77 | 1443 | 152 | 10.5 | 1051 | 116 | 11.0 | 46 | 5 | 10.9 | 263 | 24 | 9.1 | 83 | 7 | 8.4 | | | | | | | 14091 | 174 | 1.2 |
| 1977-78 | 2220 | 188 | 8.5 | 1101 | 142 | 12.9 | 51 | 5 | 9.8 | 238 | 22 | 9.2 | 231 | 2 | 0.9 | 174 | 10 | 5.7 | 425 | 7 | 1.6 | 13914 | 225 | 1.6 |
| 1978-79 | 2276 | 216 | 9.5 | 1077 | 155 | 14.4 | 47 | 4 | 8.5 | 260 | 24 | 9.2 | 262 | 12 | 4.6 | 147 | 8 | 5.4 | 483 | 13 | 2.7 | 14342 | 241 | 1.7 |
| 1979-80 | 2518 | 225 | 8.9 | 1117 | 157 | 14.1 | 59 | 4 | 6.8 | 285 | 25 | 8.8 | 345 | 22 | 6.4 | 190 | 7 | 3.7 | 522 | 10 | 1.9 | 14496 | 287 | 2.0 |
| 1980-81 | 2566 | 276 | 10.8 | 1127 | 195 | 17.3 | 69 | 10 | 14.5 | 259 | 30 | 11.6 | 306 | 21 | 6.9 | 222 | 9 | 4.1 | 583 | 11 | 1.9 | 14638 | 288 | 2.0 |
| 1981-82 | 2808 | 286 | 10.2 | 1171 | 198 | 16.9 | 73 | 6 | 8.2 | 289 | 27 | 9.3 | 353 | 21 | 5.9 | 229 | 15 | 6.6 | 693 | 19 | 2.7 | 14512 | 324 | 2.2 |
| 1982-83 | 2903 | 269 | 9.3 | 1083 | 171 | 15.8 | 62 | 7 | 11.3 | 293 | 31 | 10.6 | 343 | 30 | 8.7 | 263 | 14 | 5.3 | 859 | 16 | 1.9 | 14327 | 297 | 2.1 |
| 1983-84 | 2895 | 287 | 9.9 | 1096 | 184 | 16.8 | 75 | 8 | 10.7 | 284 | 38 | 13.4 | 341 | 23 | 6.7 | 232 | 10 | 4.3 | 867 | 24 | 2.8 | 14280 | 316 | 2.2 |
| 1985-86 | 3198 | 312 | 9.8 | 1117 | 194 | 17.4 | 60 | 8 | 13.3 | 331 | 39 | 11.8 | 136 | 15 | 11.0 | 259 | 9 | 3.5 | 1295 | 47 | 3.6 | 13765 | 383 | 2.8 |
| ALL OTHER CLASSES | | | | | | | | | | | | | | | | | | | | | | | | |
| 1973-74 | 2478 | 128 | 5.2 | 1966 | 102 | 5.2 | 52 | 3 | 5.8 | 334 | 18 | 5.4 | 126 | 5 | 4.0 | | | | | | | 33477 | 202 | 0.6 |
| 1974-75 | 2872 | 183 | 6.4 | 2279 | 136 | 6.0 | 89 | 7 | 7.9 | 407 | 33 | 8.1 | 97 | 7 | 7.2 | | | | | | | 36239 | 229 | 0.6 |
| 1975-76 | 3176 | 181 | 5.7 | 2436 | 140 | 5.7 | 115 | 6 | 5.2 | 490 | 26 | 5.3 | 135 | 9 | 6.7 | | | | | | | 37306 | 262 | 0.7 |
| 1976-77 | 3398 | 250 | 7.4 | 2519 | 193 | 7.7 | 145 | 11 | 7.6 | 555 | 39 | 7.0 | 179 | 7 | 3.9 | | | | | | | 38867 | 303 | 0.8 |
| 1977-78 | 5246 | 235 | 4.5 | 2550 | 161 | 6.3 | 154 | 8 | 5.2 | 599 | 34 | 5.7 | 590 | 7 | 1.2 | 293 | 9 | 3.1 | 1060 | 16 | 1.5 | 39076 | 286 | 0.7 |
| 1978-79 | 5490 | 261 | 4.8 | 2533 | 168 | 6.6 | 148 | 6 | 4.1 | 640 | 31 | 4.8 | 642 | 20 | 3.1 | 336 | 7 | 2.1 | 1191 | 29 | 2.4 | 40644 | 315 | 0.8 |
| 1979-80 | 5800 | 211 | 3.6 | 2546 | 128 | 5.0 | 135 | 13 | 9.6 | 675 | 29 | 4.3 | 708 | 15 | 2.1 | 413 | 4 | 1.0 | 1323 | 22 | 1.7 | 41381 | 291 | 0.7 |
| 1980-81 | 6003 | 221 | 3.7 | 2592 | 149 | 5.7 | 157 | 7 | 4.5 | 698 | 24 | 3.4 | 744 | 15 | 2.0 | 442 | 6 | 1.4 | 1370 | 20 | 1.5 | 42290 | 313 | 0.7 |
| 1981-82 | 6495 | 233 | 3.6 | 2620 | 159 | 6.1 | 161 | 5 | 3.1 | 713 | 23 | 3.2 | 840 | 19 | 2.3 | 573 | 9 | 1.6 | 1588 | 18 | 1.1 | 42670 | 295 | 0.7 |
| 1982-83 | 6951 | 270 | 3.9 | 2646 | 153 | 5.8 | 171 | 5 | 2.9 | 741 | 34 | 4.6 | 930 | 33 | 3.5 | 650 | 14 | 2.2 | 1813 | 31 | 1.7 | 42705 | 263 | 0.6 |
| 1983-84 | 7224 | 246 | 3.4 | 2583 | 144 | 5.6 | 182 | 8 | 4.4 | 753 | 39 | 5.2 | 956 | 17 | 1.8 | 683 | 12 | 1.8 | 2067 | 26 | 1.3 | 43044 | 328 | 0.8 |

* Mainland only before 1977-78, then Mainland and Commonwealth.

FIELD: Medicine

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, May 1974; and Minority Students in Medical Education: Facts and Figures III, Association of American Medical Colleges Office of Minority Affairs, 1987

## TABLE 8-12

M.D. DEGREES AWARDED TO U.S. WOMEN, BY MINORITY STATUS, 1980-1986

| YEAR | Number Degrees | Black No. | Black % | Indian No. | Indian % | Mexican No. | Mexican % | Puerto Rican No. | Puerto Rican % | Minority* No. | Minority* % | Asian No. | Asian % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | 3526 | 308 | 8.7 | 7 | 0.2 | 40 | 1.1 | 31 | 0.9 | 386 | 10.9 | | |
| 1981 | 3902 | 343 | 8.8 | 12 | 0.3 | 51 | 1.3 | 20 | 0.5 | 426 | 10.9 | | |
| 1982 | 4007 | 348 | 8.7 | 12 | 0.3 | 59 | 1.5 | 31 | 0.8 | 450 | 11.2 | | |
| 1983 | 4232 | 388 | 9.2 | 12 | 0.3 | 53 | 1.3 | 25 | 0.6 | 478 | 11.3 | | |
| 1984 | 4632 | 379 | 8.2 | 20 | 0.4 | 59 | 1.3 | 32 | 0.7 | 490 | 10.6 | 217 | 4.7 |
| 1985 | 4904 | 372 | 7.6 | 18 | 0.4 | 77 | 1.6 | 38 | 0.8 | 505 | 10.3 | 238 | 4.9 |
| 1986 | 4957 | 350 | 7.1 | 15 | 0.3 | 72 | 1.5 | 37 | 0.7 | 474 | 9.6 | 295 | 6.0 |
| TOTAL | 30160 | 2488 | 8.2 | 96 | 0.3 | 411 | 1.4 | 214 | 0.7 | 3209 | 10.6 | 750 | 5.2 |

* Excludes Asians.

## TABLE 8-13

U.S. MEDICAL SCHOOL FACULTY BY SEX AND ETHNIC ORIGIN, SELECTED YEARS, 1975-1985

| | 1975 Total | 1975 %T | 1975 Women | 1975 %W | 1978 Total | 1978 %T | 1978 Women | 1978 %W | 1981 Total | 1981 %T | 1981 Women | 1981 %W | 1985 Total | 1985 %T | 1985 Women | 1985 %W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 40578 | 100 | 6119 | 15.1 | 47140 | 100 | 7153 | 15.2 | 47701 | 100 | 7822 | 16.4 | 52464 | 100 | 9285 | 17.7 |
| Black | 733 | 1.8 | 197 | 26.9 | 820 | 1.7 | 201 | 24.5 | 810 | 1.7 | 246 | 30.4 | 950 | 1.8 | 307 | 32.3 |
| Indian | 14 | 0.0 | 2 | 14.3 | 22 | 0.0 | 2 | 9.1 | 37 | 0.1 | 7 | 18.9 | 47 | 0.1 | 9 | 19.1 |
| Mexican | 74 | 0.2 | 10 | 13.5 | 89 | 0.2 | 13 | 14.6 | 105 | 0.2 | 17 | 16.2 | 124 | 0.2 | 15 | 12.1 |
| Puerto Rican | 275 | 0.7 | 65 | 23.6 | 320 | 0.7 | 75 | 23.4 | 311 | 0.7 | 93 | 29.9 | 323 | 0.6 | 100 | 31.0 |
| Other Hispanic | 566 | 1.4 | 67 | 11.8 | 621 | 1.3 | 77 | 12.4 | 686 | 1.4 | 105 | 15.3 | 788 | 1.5 | 137 | 17.4 |
| Asian | 2383 | 5.9 | 443 | 18.6 | 2824 | 6.0 | 560 | 19.8 | 3319 | 7.0 | 755 | 22.7 | 3783 | 7.2 | 883 | 23.3 |
| White | 33309 | 82.1 | 4883 | 14.7 | 38641 | 82.0 | 5681 | 14.7 | 39232 | 82.2 | 6109 | 15.6 | 43564 | 83.0 | 7274 | 16.7 |
| Unknown | 3224 | 7.9 | 452 | 14.0 | 3803 | 8.1 | 544 | 14.3 | 3201 | 6.7 | 490 | 15.3 | 2885 | 5.5 | 560 | 19.4 |

## TABLE 8-14

ETHNIC BACKGROUND OF RESIDENTS ON DUTY SEPTEMBER 1, 1983, 1984 AND 1985

| | 1983 No. | 1983 %T | 1984 No. | 1984 %T | 1985 No. | 1985 %T |
|---|---|---|---|---|---|---|
| Total | 71,374 | 100 | 74,085 | 100 | 74,098 | 100 |
| Black | 3,379 | 4.7 | 3,506 | 4.7 | 3,322 | 4.5 |
| Indian | 111 | 0.2 | 130 | 0.2 | 128 | 0.2 |
| Mexican | 743 | 1.0 | 750 | 1.0 | 731 | 1.0 |
| Puerto Rican | 1,346 | 1.9 | 1,385 | 1.9 | 1,292 | 1.7 |
| Other Hispanic | 1,587 | 2.2 | 1,587 | 2.1 | 1,519 | 2.0 |
| Asian | 5,632 | 7.9 | 5,709 | 7.7 | 5,618 | 7.6 |
| White | 58,576 | 82.1 | 61,018 | 82.4 | 61,488 | 83.0 |

FIELD: Medicine

SOURCE: Minorities and Women in the Health Fields, 1987 Edition, Health Resources and Services Administration of the Public Health Service

## TABLE 8-15

ACTIVE FEDERAL AND NON-FEDERAL FEMALE PHYSICIANS IN THE U.S. BY SPECIALTY, 12/31/63 - 12/31/85

| Specialty | 1963 | 1970 | 1976 | 1980 | 1981 | 1982 | 1983 | 1985 |
|---|---|---|---|---|---|---|---|---|
| | Number of active female physicians | | | | | | | |
| All active female MDs 1/ | 14,957 | 21,318 | 28,966 | 44,706 | 50,894 | 56,265 | 61,421 | 71,880 |
| General practice | 3,103 | 2,486 | 3,164 | 4,677 | 5,423 | 6,067 | 6,706 | 7,996 |
| Medical specialties, total | 4,560 | 7,101 | 10,884 | 17,872 | 20,269 | 22,809 | 25,054 | 29,741 |
| Allergy | 71 | 117 | 127 | 116 | 120 | 125 | 138 | 138 |
| Cardiovascular diseases | 48 | 187 | 182 | 327 | 364 | 396 | 508 | 598 |
| Dermatology | 194 | 278 | 401 | 628 | 726 | 823 | 927 | 1,082 |
| Gastroenterology | 8 | 46 | 46 | 118 | 140 | 160 | 206 | 269 |
| Internal medicine | 1,513 | 2,383 | 4,482 | 8,130 | 9,456 | 10,832 | 11,993 | 14,716 |
| Pediatrics 2/ | 2,605 | 3,907 | 5,486 | 8,314 | 9,217 | 10,192 | 10,976 | 12,586 |
| Pulmonary diseases | 121 | 183 | 160 | 239 | 246 | 281 | 306 | 352 |
| Surgical specialties, total | 1,482 | 2,129 | 3,362 | 5,561 | 6,399 | 7,268 | 8,089 | 9,733 |
| General surgery | 187 | 311 | 757 | 1,150 | 1,336 | 1,463 | 1,601 | 1,987 |
| Obstetrics/gynecology | 913 | 1,337 | 1,897 | 3,243 | 3,717 | 4,207 | 4,672 | 5,597 |
| Ophthalmology | 239 | 307 | 436 | 657 | 751 | 869 | 974 | 1,120 |
| Orthopedic surgery | 39 | 46 | 69 | 144 | 177 | 211 | 230 | 293 |
| Otolaryngology | 55 | 52 | 80 | 141 | 161 | 204 | 238 | 287 |
| Plastic surgery | 28 | 40 | 68 | 120 | 132 | 157 | 180 | 219 |
| Other 3/ | 21 | 36 | 55 | 106 | 125 | 157 | 194 | 230 |
| Other specialties, total | 5,812 | 9,602 | 11,556 | 16,596 | 18,803 | 20,121 | 21,572 | 24,410 |
| Anesthesiology | 1,017 | 1,516 | 1,836 | 2,388 | 2,650 | 3,077 | 3,330 | 3,710 |
| General preventive med. | 117 | 100 | 106 | 109 | 137 | 140 | 158 | 199 |
| Neurology | 109 | 215 | 382 | 580 | 648 | 778 | 893 | 1,059 |
| Occupational medicine | 64 | 86 | 80 | 118 | 170 | 173 | 192 | 210 |
| Pathology 4/ | 683 | 1,282 | 1,748 | 2,241 | 2,551 | 2,812 | 2,971 | 3,270 |
| Physical medicine/rehab. | 115 | 241 | 330 | 515 | 623 | 740 | 804 | 920 |
| Psychiatry 5/ | 1,939 | 2,942 | 4,042 | 5,257 | 5,910 | 6,454 | 6,930 | 7,732 |
| Public health | 289 | 564 | 535 | 470 | 442 | 452 | 437 | 440 |
| Radiology 6/ | 329 | 673 | 1,095 | 1,742 | 1,969 | 2,356 | 2,604 | 2,989 |
| Other and unspecified | 1,150 | 1,983 | 1,402 | 3,176 | 3,703 | 3,139 | 3,283 | 3,881 |
| | Percent female of all active physicians | | | | | | | |
| All active female MDs 1/ | 5.7 | 6.9 | 8.3 | 10.8 | 11.8 | 12.5 | 13.2 | 14.5 |
| General practice | 4.2 | 4.3 | 5.7 | 7.8 | 8.9 | 9.7 | 10.5 | 11.9 |
| Medical specialties, total | 8.1 | 9.2 | 11.0 | 14.2 | 15.4 | 16.3 | 17.1 | 18.6 |
| Allergy | 8.5 | 6.8 | 7.5 | 7.6 | 7.9 | 8.2 | 8.9 | 9.2 |
| Cardiovascular diseases | 2.8 | 2.9 | 2.7 | 3.3 | 3.5 | 3.6 | 4.1 | 4.5 |
| Dermatology | 5.9 | 6.9 | 8.3 | 11.1 | 12.5 | 13.6 | 14.7 | 16.4 |
| Gastroenterology | 1.4 | 2.3 | 1.9 | 2.9 | 3.1 | 3.4 | 3.8 | 4.5 |
| Internal medicine | 4.4 | 5.7 | 7.7 | 11.4 | 12.6 | 13.5 | 14.5 | 16.3 |
| Pediatrics 2/ | 18.3 | 20.8 | 23.3 | 28.2 | 30.0 | 31.3 | 32.3 | 34.2 |
| Pulmonary diseases | 9.8 | 7.9 | 7.1 | 6.4 | 6.2 | 6.5 | 6.5 | 6.9 |
| Surgical specialties, total | 2.1 | 2.5 | 3.4 | 5.0 | 5.6 | 6.1 | 6.6 | 7.6 |
| General surgery | 0.7 | 1.0 | 2.3 | 3.4 | 3.9 | 4.1 | 4.4 | 5.2 |
| Obstetrics/gynecology | 5.8 | 7.1 | 8.5 | 12.3 | 13.7 | 14.8 | 15.9 | 18.1 |
| Ophthalmology | 3.0 | 3.1 | 3.8 | 5.1 | 5.7 | 6.3 | 6.8 | 7.5 |
| Orthopedic surgery | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.4 | 1.4 | 1.7 |
| Otolaryngology | 1.1 | 1.0 | 1.4 | 2.2 | 2.5 | 3.0 | 3.4 | 3.9 |
| Plastic surgery | 2.8 | 2.5 | 2.9 | 4.0 | 4.1 | 4.5 | 4.9 | 5.5 |
| Other 3/ | 0.2 | 0.3 | 0.4 | 0.8 | 0.8 | 1.1 | 1.3 | 1.5 |
| Other specialties, total | 9.5 | 10.7 | 12.2 | 14.0 | 15.1 | 15.7 | 16.1 | 17.1 |
| Anesthesiology | 13.3 | 14.0 | 13.9 | 15.0 | 15.7 | 16.4 | 16.5 | 16.8 |
| General preventive med. | 14.1 | 12.4 | 13.1 | 13.5 | 16.9 | 16.7 | 18.1 | 21.3 |
| Neurology | 6.0 | 7.0 | 8.6 | 10.2 | 10.4 | 11.7 | 12.5 | 13.6 |
| Occupational medicine | 3.5 | 3.2 | 3.4 | 5.0 | 6.5 | 6.7 | 7.3 | 8.0 |
| Pathology 4/ | 9.3 | 12.2 | 14.4 | 16.4 | 18.1 | 19.0 | 19.5 | 20.7 |
| Physical medicine/rehab. | 12.3 | 16.3 | 19.2 | 24.0 | 26.5 | 27.6 | 27.7 | 28.2 |
| Psychiatry 5/ | 11.7 | 12.7 | 14.9 | 17.1 | 18.6 | 19.5 | 20.2 | 21.5 |
| Public health | 16.5 | 18.6 | 20.6 | 20.3 | 20.9 | 21.2 | 20.7 | 21.4 |
| Radiology 6/ | 3.8 | 5.0 | 6.5 | 8.6 | 9.3 | 10.3 | 10.9 | 11.8 |
| Other and unspecified | 8.4 | 9.6 | 10.1 | 13.0 | 14.1 | 13.2 | 13.3 | 14.6 |

1/ Excludes inactive female physicians. Also excludes female physicians not classified as to status or activity and with address unknown.
2/ Includes pediatric allergy and pediatric cardiology.
3/ Consists of neurological, colon and rectal, thoracic, and urological surgery.
4/ Includes forensic pathology.
5/ Includes child psychiatry.
6/ Includes both diagnostic and therapeutic radiology.

SOURCE: Estimates and Projections of Black and Hispanic Physicians, Dentists and Pharmacists to 2010, Health Resources and Services Adm, Bureau of Health Professions, DDHS Pub. No. HRS-P-DV 86-1

## TABLE 8-16

## BLACK AND HISPANIC PHYSICIANS, DENTISTS & PHARAMICISTS BY SEX, Estimated 1985 and Projected 2000

| | 1985 | | | 2000 | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| Physicians | | | | | | |
| U.S. | 447,700 | 73,000 | 520,700 | 553,000 | 143,000 | 696,500 |
| Black | 11,500 | 4,100 | 15,600 | 17,300 | 11,200 | 28,500 |
| Hispanic | 15,100 | 2,500 | 17,600 | 18,300 | 5,400 | 23,700 |
| Dentists | | | | | | |
| U.S. | 132,800 | 8,100 | 140,900 | 135,700 | 25,500 | 161,200 |
| Black | 3,000 | 800 | 3,800 | 4,300 | 2,000 | 6,300 |
| Hispanic | 2,100 | 300 | 2,400 | 3,300 | 900 | 4,200 |
| Pharmacists | | | | | | |
| U.S. | 119,300 | 39,900 | 159,200 | 112,100 | 76,100 | 188,200 |
| Black | 2,300 | 1,600 | 3,900 | 3,400 | 3,900 | 7,300 |
| Hispanic | 1,900 | 800 | 2,700 | 2,500 | 1,600 | 4,100 |

FIELD: Osteopathy

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, May 1974; and Annual Report 1981 through 1986, American Association of Colleges of Osteopathic Medicine.

## TABLE 8-17

APPLICANTS, FIRST YEAR AND TOTAL ENROLLMENTS AND GRADUATES IN SCHOOLS OF OSTEOPATHIC MEDICINE IN THE U.S., BY SEX, 1968-69 - 1986-87

| YEAR | Applicants | | | 1st Yr. Enrollment | | | Total Enrollment | | | Graduate | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % | Total | Women | % | Total | Women | % | Total | Women | % |
| 1968-69 | | | | 501 | 21 | 4.0 | 1879 | 53 | 2.8 | 427 | 8 | 1.9 |
| 1969-70 | | | | 577 | 14 | 2.4 | 1997 | 59 | 3.0 | 432 | 12 | 2.8 |
| 1970-71 | | | | 423 | 17 | 2.7 | 2151 | 61 | 2.8 | 472 | 11 | 2.3 |
| 1971-72 | | | | 670 | 29 | 4.3 | 2304 | 79 | 3.4 | 485 | 18 | 3.7 |
| 1972-73 | | | | 810 | 56 | 6.9 | 2579 | 116 | 4.5 | 649 | 18 | 2.8 |
| 1973-74 | | | | 884 | 83 | 9.4 | 2780 | 181 | 6.5 | 594 | 17 | 2.9 |
| 1974-75 | | | | 974 | 106 | 10.9 | 3139 | 267 | 8.5 | 702 | 44 | 6.3 |
| 1975-76 | | | | 1038 | 140 | 13.5 | 3443 | 362 | 10.5 | 809 | 58 | 7.2 |
| 1976-77 | | | | 1088 | 179 | 16.5 | 3671 | 472 | 12.9 | 908 | 84 | 9.3 |
| 1977-78 | 3918 | 559 | 14.3 | 1163 | 192 | 16.5 | 3926 | 570 | 14.5 | 971 | 68 | 7.0 |
| 1978-79 | 3510 | 610 | 17.3 | 1322 | 222 | 16.8 | 4221 | 688 | 16.3 | 1004 | 163 | 16.2 |
| 1979-80 | 3856 | 765 | 19.8 | 1426 | 265 | 18.6 | 4571 | 789 | 17.3 | 1059 | 192 | 18.1 |
| 1980-81 | 3786 | 804 | 21.2 | 1496 | 329 | 22.0 | 4940 | 971 | 19.7 | 1151 | 202 | 17.5 |
| 1981-82 | 3885 | 901 | 23.2 | 1582 | 378 | 23.9 | 5304 | 1108 | 20.9 | 1017 | 186 | 18.3 |
| 1982-83 | 3917 | 965 | 24.6 | 1682 | 428 | 25.4 | 5822 | 1317 | 22.6 | 1317 | 261 | 19.8 |
| 1983-84 | 4045 | 1092 | 27.0 | 1746 | 460 | 26.3 | 6212 | 1526 | 24.6 | 1287 | 262 | 20.4 |
| 1984-85 | 4126 | 1168 | 28.3 | 1750 | 511 | 29.2 | 6547 | 1707 | 26.1 | 1474 | 344 | 23.3 |
| 1985-86 | 3869 | 1102 | 28.5 | 1760 | 515 | 29.3 | 6671 | 1768 | 26.5 | 1573 | | |
| 1986-87 | 3514 | 1109 | 31.6 | | | | | | | | | |
| TOTALS | 38446 | 9075 | 23.6 | 21112 | 3945 | 18.7 | 72157 | 12094 | 16.8 | 16331 | 1948 | 11.9 |

FIELD: Osteopathy

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, 1987, and Women in Health Careers, by Maryland Pennell, Shirlene Showell, American Public Health Association, DHEW No. (HRA) 75-55, June 1975, p. 74, and American Association of Colleges of Osteopathic Medicine, Annual Statistical Report 1981, 1982, 1983, 1984, and 1985

TABLE 8-18
FIRST YEAR AND TOTAL ENROLLMENTS IN U.S. OSTEOPATHIC COLLEGES BY MINORITY GROUP, 1978-79 - 1984-85

| MINORITY GROUP | 1978-79 | | 1979-80 | | 1980-81 | | 1982-83 | | 1983-84 | | 1984-85 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| **First Year Enrollment** | 1,322 | 100.0 | 1,426 | 100.0 | 1,496 | 100.0 | 1,682 | 100.0 | 1,746 | 100.0 | 1,750 | 100.0 |
| Black American | 31 | 2.4 | 40 | 2.8 | 43 | 2.9 | 38 | 2.3 | 49 | 2.8 | 42 | 2.4 |
| American Indian | 10 | 0.7 | 6 | 0.4 | 8 | 0.5 | 10 | 0.6 | 13 | 0.7 | 17 | 1.0 |
| Hispanic | 17 | 1.3 | 18 | 1.3 | 18 | 1.2 | 33 | 2.0 | 38 | 2.2 | 54 | 3.1 |
| Asian Am./Pacific Isl. | 16 | 1.2 | 30 | 2.1 | 30 | 2.0 | 46 | 2.7 | 52 | 3.0 | 47 | 2.7 |
| **First Year Minority Total** | **74** | **5.7** | **93** | **6.5** | **99** | **6.6** | **127** | **7.6** | **152** | **8.7** | **160** | **9.1** |
| **Total Enrollment** | **4,221** | **100.0** | **4,571** | **100.0** | **4,940** | **100.0** | **5,822** | **100.0** | **6,212** | **100.0** | **6,547** | **100.0** |
| Black American | 46 | 2.2 | 100 | 2.2 | 94 | 1.9 | 116 | 2.0 | 122 | 2.0 | 126 | 1.9 |
| American Indian | 24 | 0.6 | 26 | 0.6 | 19 | 0.4 | 25 | 0.4 | 39 | 0.6 | 50 | 0.8 |
| Hispanic | 11 | 0.8 | 45 | 1.0 | 52 | 1.1 | 81 | 1.4 | 98 | 1.6 | 126 | 2.5 |
| Oriental American | 45 | 1.0 | 70 | 1.5 | 87 | 1.8 | 133 | 2.3 | 152 | 2.5 | 166 | 2.5 |
| **Total Minority Enrollment** | **192** | **4.5** | **241** | **5.3** | **252** | **5.1** | **355** | **6.1** | **411** | **6.6** | **468** | **7.2** |

FIELD: Dentistry

SOURCE: Women's Participation in First-Professional Degree Programs in Medicine, Dentistry, Veterinary Medicine, and Law, 1969-70 through 1974-75, NCES 76-023; Annual Report on Dental Education Series, 1975-76 through 1986-87, American Dental Association

## TABLE 8-19

APPLICATIONS, ENROLLMENTS, GRADUATES, U.S. DENTAL SCHOOLS, BY SEX, 1968-69 - 1986-87

| YEAR | APPLICANTS | | | FIRST-YEAR ENROLLMENT | | | TOTAL ENROLLMENT | | | GRADUATES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| 1968-69 | | | | 4,203 | 38 | 0.9 | 15,408 | 167 | 1.1 | | 36 | 1.1 |
| 1969-70 | 10,325 | 120 | 1.2 | 4,354 | 69 | 1.6 | 16,136 | 227 | 1.4 | 3,748 | 36 | 1.0 |
| 1970-71 | 10,410 | 160 | 1.5 | 4,639 | 103 | 2.2 | 16,510 | 274 | 1.7 | 3,777 | 46 | 1.2 |
| 1971-72 | 11,102 | 302 | 2.7 | 5,103 | 160 | 3.1 | 17,433 | 355 | 2.0 | 3,894 | 46 | 1.2 |
| 1972-73 | 13,478 | 506 | 3.8 | 6,010 | 241 | 4.0 | 17,774 | 556 | 3.1 | 4,086 | 58 | 1.4 |
| 1973-74 | 14,820 | 727 | 4.9 | 6,123 | 423 | 6.9 | 19,215 | 892 | 4.6 | 4,478 | 88 | 2.0 |
| 1974-75 | 14,850 | 1,193 | 8.0 | 5,828 | 638 | 10.9 | 20,163 | 1,403 | 7.0 | 4,513 | 92 | 2.0 |
| 1975-76 | 15,734 | * | | 5,763 | 707 | 12.3 | 20,767 | 1,861 | 9.0 | 4,969 | 156 | 3.1 |
| 1976-77 | 14,807 | * | | 5,935 | 802 | 13.5 | 21,013 | 2,349 | 11.1 | 5,336 | 248 | 4.6 |
| 1977-78 | 12,835 | * | | 5,954 | 880 | 14.8 | 21,510 | 2,796 | 13.0 | 5,177 | 369 | 7.1 |
| 1978-79 | 11,753 | * | | 6,301 | 1,000 | 15.9 | 22,179 | 3,112 | 14.0 | 5,324 | 634 | 11.9 |
| 1979-80 | 10,520 | * | | 6,132 | 1,076 | 17.5 | 22,482 | 3,482 | 15.5 | 5,424 | 634 | 11.7 |
| 1980-81 | 9,648 | 1,960 | 20.3 | 6,030 | 1,194 | 19.8 | 22,842 | 3,879 | 17.0 | 5,256 | 715 | 13.6 |
| 1981-82 | 8,852 | 1,861 | 21.0 | 5,855 | 1,268 | 21.7 | 22,621 | 4,227 | 18.7 | 5,550 | 825 | 14.9 |
| 1982-83 | 7,724 | 1,722 | 22.3 | 5,498 | 1,223 | 22.2 | 22,235 | 4,457 | 20.0 | 5,371 | 838 | 15.6 |
| 1983-84 | 7,128 | 1,779 | 25.0 | 5,371 | 1,313 | 24.4 | 21,428 | 4,733 | 22.1 | 5,274 | 1,089 | 20.6 |
| 1984-85 | 6,490 | * | | 5,047 | 1,369 | 27.1 | 20,588 | 4,899 | 23.8 | 5,353 | 1,140 | 23.0 |
| 1985-86 | 6,216 | * | | 4,843 | 1,324 | 27.3 | 19,563 | 4,944 | 25.3 | 4,958 | 1,094 | 22.1 |
| 1986-87 | 5,724 | 1,790 | 31.3 | 4,554 | 1,387 | 30.5 | 18,673 | 5,068 | 27.1 | | | |

* Not available.

## TABLE 8-20

FIRST YEAR ENROLLMENT IN U.S. DENTAL SCHOOLS BY MINORITY GROUP AND SEX, SELECTED YEARS, 1972-73 - 1986-87

| YEAR | Total | Black | | | Indian | | | Hispanic | | | Asian | | | All Minority | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | % | Women | Total | % | Women | Total | % | Women | Total | % | Women | Total | % | Women |
| 1972-73 | 6287 | 266 | 5.0 | | 5 | 0.1 | | 56 | 1 | | 138 | 2.6 | | 465 | 8.6 | |
| 1977-78 | 5954 | 296 | 5.0 | | 12 | 0.2 | | 110 | 1.8 | | 223 | 3.8 | | 641 | 10.8 | |
| 1980-81 | 6030 | 283 | 4.7 | | 12 | 0.2 | | 160 | 2.7 | | 317 | 5.3 | | 772 | 12.8 | |
| 1982-83 | 5855 | 199 | 3.4 | | 21 | 0.4 | | 183 | 3.1 | | 378 | 6.4 | | 781 | 13.2 | |
| 1983-84 | 5874 | 176 | 3.0 | | 9 | 0.2 | | 172 | 2.9 | | 436 | 7.4 | | 673 | 11.6 | |
| 1984-85 | 5047 | 249 | 4.9 | 135 | 17 | 0.3 | 4 | 264 | 5.2 | 104 | 465 | 9.2 | 134 | 1049 | 20.7 | 249 |
| 1985-86 | 4843 | 281 | 5.8 | 159 | 16 | 0.3 | 6 | 313 | 6.4 | 109 | 446 | 9.2 | 182 | 1056 | 21.8 | 439 |
| 1986-87 | 4554 | 284 | 6.3 | 135 | 9 | 0.2 | 4 | 316 | 6.9 | 116 | 499 | 11.0 | 194 | 1108 | 24.4 | 66 |

## TABLE 8-21

TOTAL ENROLLMENT IN US.S. DENTAL SCHOOLS BY MINORITY GROUP, SELECTED YEARS 1972-73 - 1986-87

| YEAR | Total | Black | | Indian | | Hispanic | | Asian | | All Min. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1972-73 | 18309 | 765 | 4.2 | 14 | 0.1 | 153 | 0.8 | 429 | 2.3 | 1361 | 7.4 |
| 1977-78 | 21510 | 966 | 4.5 | 54 | 0.3 | 390 | 1.8 | 747 | 3.5 | 2156 | 10.0 |
| 1980-81 | 22842 | 1017 | 4.5 | 53 | 0.2 | 519 | 2.3 | 1040 | 4.6 | 2614 | 11.5 |
| 1981-82 | 22621 | 999 | 4.4 | 61 | 0.3 | 583 | 2.6 | 1196 | 5.3 | 2839 | 12.5 |
| 1982-83 | 22235 | 1010 | 4.5 | 64 | 0.3 | 601 | 2.7 | 1357 | 6.1 | 3032 | 13.6 |
| 1983-84 | 21428 | 1002 | 4.7 | 64 | 0.3 | 601 | 2.8 | 1357 | 6.3 | 3024 | 14 |
| 1984-85 | 20588 | | | | | | | | | 2965 | 14.4 |
| 1985-86 | 19563 | | | | | | | | | 2888 | 14.7 |
| 1986-87 | 18673 | | | | | | | | | 2865 | 15.3 |

FIELD: Dentistry

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, May 1974; and Annual Report on Dental Education Series, 1973-74 through 1986-87, American Dental Association

## TABLE 8-22

GRADUATES OF SCHOOLS OF DENTISTRY IN THE UNITED STATES, BY RACIAL/ETHNIC CATEGORY, 1970-71 THROUGH 1985-86

| ACADEMIC YEAR | TOTAL GRADUATES | RACIAL / ETHNIC CATEGORY | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL MINORITY* | | BLACK | | AMERICAN INDIAN | | HISPANIC | | ASIAN | | WHITE | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1970-71 | 3,598* | 137 | 3.8 | 53 | 1.5 | 1 | [4] | 9 | 0.3 | 62 | 1.7 | 3,461 | 96.2 |
| 1971-72§ | 3,689* | 167' | 4.5 | 74 | 2.0 | 1 | [4] | 12 | 0.3 | 61 | 1.7 | 3,522 | 95.5 |
| 1972-73 | 4,191* | 241 | 5.8 | 110 | 2.6 | 1 | [4] | 25 | 0.6 | 73 | 1.7 | 3,950 | 94.2 |
| 1973-74 | 4,479 | 335 | 7.5 | 154 | 3.4 | 2 | 0.4 | 31 | 0.7 | 113 | 2.5 | 4,144 | 92.5 |
| 1974-75 | 4,933 | 368 | 7.5 | 187 | 3.8 | 5 | 0.1 | 33 | 0.7 | 107 | 2.2 | 4,565 | 92.5 |
| 1975-76 | 5,282 | 467 | 8.8 | 213 | 4.0 | 3 | 0.1 | 50 | 0.9 | 157 | 3.0 | 4,815 | 91.2 |
| 1977-78 | 5,177 | 461 | 8.9 | 215 | 4.2 | 15 | 0.2 | 69 | 1.3 | 162 | 3.1 | 4,716 | 91.1 |
| 1978-79 | 5,368 | 485 | 9.0 | 182 | 3.4 | 18 | 0.3 | 77 | 1.4 | 208 | 3.9 | 4,833 | 91.0 |
| 1980-81 | 5,256 | 520 | 9.9 | 190 | 3.7 | 14 | 0.3 | 119 | 2.3 | 197 | 3.7 | 4,736 | 90.1 |
| 1981-82 | 5,550 | 564 | 10.2 | 214 | 3.9 | 14 | 0.3 | 90 | 1.6 | 246 | 4.4 | 4,986 | 89.8 |
| 1982-83 | 5,371 | 614 | 11.6 | 227 | 4.3 | 12 | 0.2 | 110 | 2.1 | 265 | 5.0 | 4,757 | 88.6 |
| 1983-84 | 5,274 | 571 | 10.0 | 200 | 3.5 | 12 | 0.2 | 144 | 2.5 | 215 | 3.8 | 4,703 | 89.2 |
| 1984-85 | 5,353 | 831 | 15.5 | 223 | 4.2 | 17 | 0.3 | 213 | 4.0 | 378 | 7.1 | 4,522 | 84.5 |
| 1985-86 | 4,957 | 795 | 16.0 | 195 | 3.9 | 10 | 0.2 | 208 | 4.2 | 382 | 7.7 | 4,162 | 84.0 |

*Includes "Other Minority" in 1971-72 through 1975-76

*Excludes University of Puerto Rico and two schools which did not report racial/ethnic data on graduates in 1970-71 and 1971-72.

§Minority data concern only U.S. citizens; non-citizen minority graduates are included with white graduates.

'Includes non-citizen minority graduates from Howard University.

## TABLE 8-23

DENTAL FACULTY, 1986-87

| FACULTY* | Total No. | Total %T | Clinical No. | Clinical %C | Science No. | Science %S | Admin. No. | Admin. %A |
|---|---|---|---|---|---|---|---|---|
| Total | 6385 | 100.0 | 4611 | 100.0 | 1442 | 100.0 | 332 | 100.0 |
| Women | 1561 | 24.4 | 1135 | 24.6 | 385 | 26.7 | 41 | 12.3 |
| Black | 410 | 6.4 | 329 | 7.1 | 81 | 5.6 | | |
| Men | 320 | 5.0 | 257 | 5.6 | 63 | 4.4 | | |
| Women | 90 | 1.4 | 72 | 1.6 | 18 | 1.2 | | |
| Hispanic | 258 | 4.0 | 221 | 4.8 | 37 | 2.6 | | |
| Men | 204 | 3.2 | 176 | 3.8 | 28 | 1.9 | | |
| Women | 54 | 0.8 | 45 | 1.0 | 9 | 0.6 | | |
| Indian | 28 | 0.4 | 21 | 0.5 | 7 | 0.5 | | |
| Men | 25 | 0.4 | 19 | 0.4 | 6 | 0.4 | | |
| Women | 3 | 0.0 | 2 | 0.0 | 1 | 0.1 | | |
| Asian | 498 | 7.8 | 360 | 7.8 | 138 | 9.6 | | |
| Men | 409 | 6.4 | 285 | 6.2 | 124 | 8.6 | | |
| Women | 89 | 1.4 | 75 | 1.6 | 14 | 1.0 | | |

FIELD: Veterinary Medicine

SOURCE: Association of American Veterinary Medical Colleges, Personal communication, July 1, 1987

## TABLE 8-24

ENROLLMENTS AND GRADUATES IN U.S. SCHOOLS OF VETERINARY MEDICINE BY SEX, 1968-69 - 1986-87

| YEAR | FIRST YEAR ENROLLMENT | | | TOTAL ENROLLMENT | | | GRADUATES | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | Women | % W | Total | Women | % W |
| 1968-69 | 1,327 | 120 | 9.0 | 4,779 | 362 | 7.6 | 1,006 | 56 | 5.6 |
| 1969-70 | 1,386 | 159 | 11.5 | 4,726 | 417 | 8.8 | 1,206 | 90 | 7.5 |
| 1970-71 | 1,439 | 158 | 11.0 | 4,716 | 444 | 9.4 | 1,252 | 98 | 7.8 |
| 1971-72 | 1,509 | 228 | 15.1 | 5,163 | 593 | 11.5 | 1,247 | 117 | 9.4 |
| 1972-73 | 1,760 | 327 | 18.6 | 5,439 | 745 | 13.7 | 1,299 | 133 | 10.2 |
| 1973-74 | 1,520 | 350 | 23.0 | 5,528 | 957 | 17.3 | 1,384 | 155 | 11.2 |
| 1974-75 | 1,792 | 453 | 25.3 | 5,985 | 1,220 | 20.4 | 1,415 | 225 | 15.9 |
| 1975-76 | 1,807 | 618 | 34.2 | 6,274 | 1,719 | 27.4 | 1,532 | 277 | 18.1 |
| 1976-77 | 1,856 | 598 | 32.2 | 6,571 | 1,805 | 27.5 | 1,586 | 362 | 22.8 |
| 1977-78 | 1,873 | 706 | 37.7 | 6,903 | 2,129 | 30.8 | 1,635 | 409 | 25.0 |
| 1978-79 | 2,086 | 766 | 36.7 | 7,312 | 2,471 | 33.8 | 1,704 | 499 | 29.3 |
| 1979-80 | 2,264 | 912 | 40.3 | 7,594 | 2,751 | 36.2 | 1,852 | 615 | 33.2 |
| 1980-81 | 2,237 | 987 | 44.1 | 8,154 | 3,220 | 39.4 | 1,931 | 702 | 36.3 |
| 1981-82 | 2,313 | 1,100 | 47.5 | 8,499 | 3,576 | 42.0 | 1,886 | 668 | 35.4 |
| 1982-83 | 2,247 | 1,124 | 50.0 | 8,682 | 4,028 | 46.4 | 2,012 | 822 | 40.9 |
| 1983-84 | 2,320 | 1,127 | 48.6 | 8,816 | 4,152 | 47.1 | 2,138 | 887 | 41.5 |
| 1984-85 | 2,327 | 1,140 | 49.0 | 8,917 | 4,376 | 49.1 | 2,149 | 1,038 | 48.3 |
| 1985-86 | 2,282 | 1,265 | 55.4 | 8,938 | 4,536 | 50.8 | 2,104 | 1,021 | 48.5 |
| 1986-87 | 2,273 | 1,329 | 58.5 | 8,887 | 4,714 | 53.0 | | | |

## TABLE 8-25

ENROLLMENTS IN U.S. SCHOOLS OF VETERINARY MEDICINE BY SEX AND MINORITY GROUP, 1986-87

| SEX AND MINORITY GROUP | FIRST YEAR ENROLLMENT | | TOTAL ENROLLMENT | |
|---|---|---|---|---|
| | No. | V % | No. | V % |
| TOTAL | 2,273 | 100.0 | 8,887 | 100.0 |
| Male | 944 | 41.5 | 4,173 | 47.1 |
| Female | 1,329 | 58.5 | 4,714 | 53.0 |
| TOTAL MINORITY | 160 | 7.0 | 551 | 6.2 |
| Male | 61 | 2.7 | 244 | 2.7 |
| Female | 99 | 4.4 | 307 | 3.5 |
| BLACK | 65 | 2.9 | 202 | 2.3 |
| Male | 29 | 1.3 | 87 | 1.0 |
| Female | 36 | 1.6 | 115 | 1.3 |
| HISPANIC | 53 | 2.3 | 179 | 2.0 |
| Male | 18 | 0.8 | 91 | 1.0 |
| Female | 35 | 1.5 | 88 | 1.0 |
| ASIAN | 28 | 1.2 | 112 | 1.3 |
| Male | 8 | 0.4 | 38 | 0.4 |
| Female | 20 | 0.9 | 74 | 0.8 |
| PACIFIC ISLANDER | 4 | 0.2 | 10 | 0.1 |
| Male | 2 | 0.1 | 4 | * |
| Female | 2 | 0.1 | 6 | 0.1 |
| AMERICAN INDIAN | 10 | 0.4 | 48 | 0.5 |
| Male | 4 | 0.2 | 24 | 0.3 |
| Female | 6 | 0.2 | 24 | 0.3 |

*Less than .05 percent

FIELD: Veterinary Medicine

SOURCE: Personal Communication, Association of American Veterinary Medical Colleges, July 1, 1987

## TABLE 8-26

VETERINARIANS BY SEX, 1983 AND 1985

| | TOTAL | WOMEN | % W |
|---|---|---|---|
| Members of the AVMA* | | | |
| 1983 | 37,715 | 5,265 | 14.0 |
| 1985 | 40,137 | 6,092 | 15.2 |
| 1986- December | 43,456 | 8,117 | 18.7 |

* AVMA estimates that its membership includes 80-85% of all veterinarians.

## TABLE 8-27

FACULTY IN 27 U.S. SCHOOLS AND COLLEGES OF VETERINARY MEDICINE, 1986-87

| | Total | | Tenure Track (Asst. Prof. and Above) | | Non-Tenure Track (Instructor and Lecturer) | |
|---|---|---|---|---|---|---|
| | No. | V% | No. | V% | No. | V% |
| Total | 2,809 | 100.0 | 2,576 | 100.0 | 233 | 100.0 |
| Male | 2,409 | 85.8 | 2,266 | 88.0 | 143 | 61.4 |
| Female | 400 | 14.2 | 310 | 12.1 | 90 | 38.6 |
| Majority | 2,624 | 93.4 | 2,408 | 93.5 | 216 | 92.7 |
| Minority | 185 | 6.6 | 168 | 6.5 | 17 | 7.3 |

FIELD: Optometry

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Public Health Service, 1987 and Women in Health Careers, by Maryland Pennell and Shirlene Showell, Health Resources Administration, U.S. Department of HEW, HRA 75-55, June 1975; data from the Association of Schools and Colleges of Optometry; and surveys conducted by Council on Optometric Education, American Optometric Association

TABLE 8-28

TOTAL ENROLLMENTS AND GRADUATES OF OPTOMETRY BY SEX, ACADEMIC YEARS 1969-70 THRU 1985-86

| YEAR | NUMBER OF STUDENTS | | | | | GRADUATES* | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | MEN | % MEN | WOMEN | % WOMEN | TOTAL | WOMEN | % WOMEN |
| 1969-70 | 2,488 | 2,415 | 97.1 | 73 | 2.9 | 444 | 23 | 5.2 |
| 1970-71 | 2,831 | 2,749 | 97.1 | 82 | 2.9 | 530 | 12 | 2.3 |
| 1971-72 | 3,097 | 2,985 | 96.4 | 112 | 3.6 | 684 | 18 | 2.6 |
| 1972-73 | 3,328 | 3,158 | 94.9 | 170 | 5.1 | 692 | 17 | 2.5 |
| 1973-74 | 3,529 | 3,268 | 92.7 | 261 | 7.3 | 793 | 34 | 4.3 |
| 1974-75 | 3,679 | 3,328 | 90.5 | 351 | 9.5 | 809 | 39 | 4.8 |
| 1975-76 | 3,888 | 3,432 | 88.3 | 456 | 11.7 | 906 | 72 | 7.9 |
| 1976-77 | 4,033 | 3,491 | 86.6 | 542 | 13.4 | 923 | 103 | 11.2 |
| 1977-78 | 4,440 | 3,741 | 84.3 | 699 | 15.7 | 978 | 126 | 12.9 |
| 1978-79 | 4,436 | 3,679 | 82.9 | 757 | 17.1 | 916 | 140 | 15.3 |
| 1979-80 | 4,500 | 3,632 | 80.7 | 868 | 19.3 | 1,073 | 166 | 15.5 |
| 1980-81 | 4,540 | 3,555 | 78.3 | 985 | 21.7 | 1,096 | 204 | 18.6 |
| 1981-82 | 4,541 | 3,464 | 76.3 | 1,077 | 23.7 | 1,113 | 224 | 20.1 |
| 1982-83 | 4,561 | 3,388 | 74.3 | 1,173 | 25.7 | 1,120 | 246 | 22.0 |
| 1983-84 | 4,539 | 3,248 | 71.6 | 1,291 | 28.4 | 1,171 | 285 | 24.3 |
| 1984-85 | 4,460 | 3,069 | 68.8 | 1,391 | 31.2 | 1,117 | 306 | 27.4 |
| 1985-86 | 4,209 | 2,759 | 65.5 | 1,451 | 34.5 | | | |

*From 1974-75, this figure is full-time fourth year student enrollment.

TABLE 8-29

ENROLLMENTS IN U.S. SCHOOLS OF OPTOMETRY BY ETHNIC STATUS 1973-74 THRU 1985-86

| YEAR | TOTAL | | BLACK | | SPANISH SURNAMED | | NATIVE AMERICAN INDIAN | | ASIAN AMERICAN | | WHITE AND ALL OTHERS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| 1973-74 | 3,529 | 100.00 | 52 | 1.47 | 39 | 1.11 | 5 | 0.14 | 141 | 4.00 | 3,292 | 93.28 |
| 1974-75 | 3,679 | 100.00 | 73 | 1.98 | 45 | 1.22 | 8 | 0.22 | 153 | 4.16 | 3,400 | 92.42 |
| 1975-76 | 3,888 | 100.00 | 83 | 2.13 | 55 | 1.41 | 5 | 0.13 | 166 | 4.27 | 3,579 | 92.05 |
| 1976-77 | 4,033 | 100.00 | 89 | 2.21 | 46 | 1.14 | 6 | 0.15 | 157 | 3.89 | 3,735 | 92.61 |
| 1977-78 | 4,440 | 100.00 | 79 | 1.78 | 55 | 1.24 | 7 | 0.16 | 153 | 3.45 | 4,146 | 93.38 |
| 1978-79 | 4,436 | 100.00 | 62 | 1.39 | 66 | 1.49 | 11 | 0.25 | 166 | 3.74 | 4,131 | 93.12 |
| 1979-80 | 4,500 | 100.00 | 56 | 1.24 | 67 | 1.49 | 13 | 0.29 | 208 | 4.62 | 4,156 | 92.36 |
| 1980-81 | 4,540 | 100.00 | 57 | 1.26 | 80 | 1.76 | 12 | 0.26 | 243 | 5.35 | 4,148 | 90.48 |
| 1981-82 | 4,541 | 100.00 | 57 | 1.26 | 98 | 2.16 | 9 | 0.20 | 283 | 6.23 | 4,094 | 90.16 |
| Men | 3,464 | 76.28 | 29 | 0.64 | 72 | 1.59 | 6 | 0.13 | 181 | 3.99 | 3,176 | 69.94 |
| Women | 1,077 | 23.72 | 28 | 0.62 | 26 | 0.57 | 3 | 0.07 | 102 | 2.25 | 918 | 20.22 |
| 1982-83 | 4,561 | 100.00 | 76 | 1.67 | 107 | 2.35 | 19 | 0.42 | 296 | 6.49 | 4,063 | 89.08 |
| Men | 3,388 | 74.28 | 38 | 0.83 | 74 | 1.62 | 13 | 0.29 | 181 | 3.97 | 3,082 | 67.57 |
| Women | 1,173 | 25.72 | 38 | 0.83 | 33 | 0.72 | 6 | 0.13 | 115 | 2.52 | 981 | 21.51 |
| 1984-85 | 4,460 | 100.00 | 96 | 2.15 | 116 | 2.60 | 21 | 0.47 | 269 | 6.03 | 3,958 | 88.74 |
| 1985-86 | 4,445 | 100.00 | 111 | 2.50 | 125 | 2.81 | 20 | 0.44 | 312 | 7.01 | 3,877 | 87.22 |

FIELD: Pharmacy

SOURCE: Earned Degrees Conferred Series, 1968-69 thru 1985-86, U.S. Office of Education (NCES)

## TABLE 8-30

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1968-69 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1968-69 | 4,172 | 692 | 16.6 | 232 | 33 | 14.2 | 74 | 4 | 5.4 |
| 1969-70 | 4,543 | 853 | 18.8 | 229 | 38 | 16.6 | 79 | 11 | 13.9 |
| 1970-71 | 4,593 | 951 | 20.7 | 194 | 40 | 20.6 | 94 | 1 | 1.1 |
| 1971-72 | 4,668 | 1,088 | 23.3 | 221 | 49 | 22.2 | 101 | 8 | 7.9 |
| 1972-73 | 5,070 | 1,277 | 25.1 | 167 | 36 | 21.6 | 296 | 75 | 25.3 |
| 1973-74 | 5,773 | 1,560 | 27.0 | 240 | 44 | 18.3 | 132 | 16 | 12.1 |
| 1974-75 | 6,487 | 1,821 | 28.1 | 285 | 75 | 26.3 | 206 | 46 | 22.3 |
| 1975-76 | 7,018 | 2,137 | 30.5 | 307 | 60 | 19.5 | 81 | 8 | 9.9 |
| 1976-77 | 7,495 | 2,434 | 32.5 | 274 | 72 | 26.3 | 75 | 10 | 13.3 |
| 1977-78 | 7,468 | 2,712 | 36.3 | 320 | 91 | 28.4 | 96 | 13 | 13.5 |
| 1978-79 | 6,919 | 2,759 | 39.9 | 330 | 89 | 27.0 | 104 | 23 | 22.1 |
| 1979-80 | 7,122 | 2,919 | 41.0 | 380 | 117 | 30.8 | 89 | 16 | 18.0 |
| 1980-81 | 6,640 | 2,910 | 43.8 | 336 | 120 | 35.7 | 108 | 17 | 15.7 |
| 1981-82 | 6,367 | 2,930 | 46.0 | 368 | 135 | 36.7 | 127 | 21 | 16.5 |
| 1982-83 | 5,708 | 2,795 | 49.0 | 331 | 123 | 37.2 | 111 | 25 | 22.5 |
| 1983-84 | 5,480 | 2,706 | 49.4 | 333 | 118 | 35.4 | 153 | 48 | 31.4 |
| 1984-85 | 5,011 | 2,668 | 53.2 | 282 | 107 | 37.9 | 147 | 47 | 32.0 |
| 1985-86 | 5,130 | 2,766 | 53.9 | 277 | 103 | 37.2 | 185 | 49 | 26.5 |
| TOTAL | 105,673 | 37,978 | 35.9 | 5,106 | 1,450 | 28.4 | 2,222 | 538 | 24.2 |

SOURCE: The Status of Women in Pharmaceutical Education, by Christopher A. Rodowskas, Jr., American Association of Colleges of Pharmacy; Doctorate Recipients from United States Universities, Summary Reports 1972-86, National Research Council

## TABLE 8-31

DOCTORAL RECIPIENTS IN THE PHARMACEUTICAL SCIENCES BY SEX, 1920-1986

| YEAR OF DOCTORATE | PHARMACY | | | PHARMACOLOGY | | | PHARMACEUTICAL CHEMISTRY | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % WOMEN | TOTAL | WOMEN | % WOMEN | TOTAL | WOMEN | % WOMEN |
| 1920-29 | 11 | 1 | 9.1 | 22 | 2 | 11.0 | 5 | 0 | 0.0 |
| 1930-39 | 22 | 1 | 4.5 | 93 | 10 | 10.8 | 27 | 2 | 7.4 |
| 1940-49 | 18 | 1 | 5.5 | 190 | 7 | 3.7 | 47 | 4 | 8.5 |
| 1950-59 | 263 | 15 | 5.7 | 466 | 45 | 9.7 | 194 | 2 | 1.0 |
| 1960-69 | 366 | 21 | 5.7 | 958 | 98 | 10.2 | 471 | 18 | 3.8 |
| 1970-71 | 115 | 6 | 5.2 | 323 | 38 | 11.8 | 122 | 9 | 7.4 |
| 1971-72 | 57 | 2 | 3.5 | 187 | 23 | 12.3 | 48 | 8 | 16.7 |
| 1972-73 | 72 | 1 | 1.4 | 160 | 27 | 16.9 | 50 | 6 | 12.0 |
| 1973-74 | 61 | 5 | 8.2 | 178 | 35 | 19.7 | 62 | 6 | 9.7 |
| 1974-75 | 70 | 7 | 10.0 | 166 | 26 | 15.7 | 66 | 9 | 13.6 |
| 1975-76 | 63 | 9 | 14.3 | 205 | 25 | 12.2 | 55 | 9 | 16.4 |
| 1976-77 | 49 | 6 | 12.2 | 196 | 42 | 21.4 | 50 | 5 | 10.0 |
| 1977-78 | 61 | 9 | 14.8 | 198 | 12 | 6.1 | 51 | 5 | 9.8 |
| 1978-79 | 69 | 15 | 21.7 | 217 | 33 | 15.2 | 43 | 6 | 14.0 |
| 1979-80 | 70 | 9 | 12.9 | 257 | 60 | 23.3 | 52 | 15 | 28.8 |
| 1980-81 | 69 | 11 | 15.9 | 280 | 69 | 24.6 | 52 | 5 | 9.6 |
| 1981-82 | 81 | 12 | 14.8 | 276 | 76 | 27.5 | 55 | 11 | 20.0 |
| 1982-83 | 81 | 19 | 23.5 | 217 | 71 | 32.7 | 78 | 16 | 20.5 |
| 1983-84 | 102 | 28 | 27.5 | 237 | 60 | 25.3 | 56 | 15 | 26.8 |
| 1984-85 | 106 | 28 | 26.4 | 229 | 74 | 32.3 | 60 | 15 | 25.0 |
| 1985-86 | 106 | 25 | 23.6 | 240 | 79 | 32.9 | 58 | 17 | 29.3 |
| TOTAL | 1,912 | 231 | 12.1 | 5,095 | 912 | 17.9 | 1,702 | 182 | 10.7 |

FIELD: Pharmacy

SOURCE: Degrees Conferred by Schools and Colleges of Pharmacy 1986-87, American Association of Colleges of Pharmacy, 1987

## TABLE 8-32

PHARMACY DEGREES CONFERRED BY LEVEL OF DEGREE, SEX AND ETHNIC GROUP, 1972-1986

| YEAR | White American | | | Black American | | | Hispanic American | | | Asian American | | | American Indian | | | Foreign | | | Total[1] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | %W | M | F | %B | M | F | %H | M | F | %A | M | F | %I | M | F | %F | M | F | Total | %F |
| **Bachelor of Science and First Professional Degrees** | | | | | | | | | | | | | | | | | | | | | | |
| 1972 | 3419 | 914 | 89 | 76 | 62 | 3 | 80 | 73 | 3 | | | | | | | 73 | 43 | 2 | 3713 | 1145 | 4858 | 24 |
| 1973 | 3567 | 996 | 86 | 82 | 64 | 3 | 105 | 129 | 4 | 134 | 91 | 4 | 3 | 2 | 0.1 | 61 | 58 | 2 | 3957 | 1344 | 5301 | 25 |
| 1974 | 3451 | 1281 | 86 | 99 | 50 | 2 | 121 | 151 | 4 | 110 | 101 | 3 | 6 | 1 | 0.1 | 128 | 85 | 3 | 4426 | 1671 | 6097 | 27 |
| 1975 | 4365 | 1488 | 85 | 108 | 70 | 3 | 115 | 158 | 4 | 121 | 74 | 3 | 8 | 0 | 0.1 | 209 | 115 | 5 | 4935 | 1913 | 6848 | 28 |
| 1976 | 4623 | 1860 | 85 | 110 | 77 | 2 | 97 | 145 | 3 | 136 | 87 | 3 | 9 | 2 | 0.1 | 212 | 104 | 4 | 5278 | 2312 | 7590 | 30 |
| 1977 | 4851 | 2188 | 86 | 107 | 119 | 3 | 139 | 176 | 4 | 142 | 103 | 3 | 6 | 3 | 0.1 | 260 | 98 | 4 | 5510 | 2690 | 8200 | 33 |
| 1978 | 4522 | 2395 | 87 | 125 | 112 | 3 | 128 | 173 | 4 | 140 | 118 | 3 | 5 | 1 | 0.1 | 156 | 77 | 3 | 5093 | 2889 | 7982 | 36 |
| 1979 | 4158 | 2516 | 86 | 116 | 159 | 4 | 100 | 189 | 4 | 147 | 122 | 3 | 13 | 2 | 0.2 | 134 | 70 | 3 | 4677 | 3069 | 7746 | 40 |
| 1980 | 3985 | 2511 | 85 | 113 | 140 | 3 | 97 | 182 | 4 | 164 | 131 | 4 | 7 | 1 | 0.1 | 148 | 84 | 3 | 4541 | 3071 | 7612 | 40 |
| 1981 | 3603 | 2773 | 85 | 90 | 147 | 3 | 135 | 235 | 5 | 140 | 153 | 4 | 1 | 4 | 0.1 | 153 | 91 | 3 | 4127 | 3406 | 7533 | 45 |
| 1982 | 3233 | 2749 | 85 | 96 | 160 | 4 | 88 | 156 | 3 | 167 | 159 | 5 | 8 | 6 | 0.2 | 149 | 77 | 3 | 3753 | 3313 | 7066 | 47 |
| 1983 | 2810 | 2596 | 81 | 90 | 174 | 4 | 97 | 171 | 4 | 148 | 177 | 5 | 5 | 3 | 0.1 | 164 | 117 | 4 | 3370 | 3275 | 6645 | 49 |
| 1984 | 2469 | 2475 | 79 | 102 | 150 | 4 | 138 | 84 | 4 | 152 | 195 | 6 | 6 | 4 | 0.2 | 211 | 130 | 5 | 3183 | 3111 | 6294 | 49 |
| 1985 | 2228 | 2537 | 80 | 113 | 150 | 4 | 99 | 148 | 4 | 121 | 206 | 5 | 3 | 4 | 0.1 | 195 | 141 | 6 | 2764 | 3195 | 5959 | 54 |
| 1986 | 2162 | 2526 | 78 | 122 | 199 | 5 | 91 | 132 | 4 | 137 | 202 | 6 | 7 | 4 | 0.2 | 226 | 202 | 7 | 2745 | 3265 | 6010 | 54 |
| **Master of Science Degrees** | | | | | | | | | | | | | | | | | | | | | | |
| 1972 | 144 | 24 | 64 | 1 | 1 | 1 | 2 | | 1 | | | | | | | 57 | 30 | 33 | 205 | 56 | 261 | 21 |
| 1973 | 192 | 24 | 66 | 4 | 1 | 2 | 2 | | 1 | 2 | 1 | 1 | | | | 53 | 24 | 24 | 273 | 53 | 326 | 16 |
| 1974 | 201 | 42 | 76 | 2 | 1 | 1 | 1 | | 0 | 3 | 2 | 2 | | | | 41 | 25 | 21 | 250 | 70 | 320 | 22 |
| 1975 | 180 | 50 | 68 | 3 | 1 | 1 | 4 | | 1 | 2 | 5 | 2 | | | | 58 | 33 | 27 | 250 | 89 | 339 | 26 |
| 1976 | 220 | 59 | 71 | 5 | 1 | 2 | 2 | 2 | 1 | 18 | 6 | 6 | | | | 49 | 24 | 19 | 301 | 92 | 393 | 23 |
| 1977 | 227 | 64 | 73 | 3 | 2 | 1 | | 1 | 0 | 14 | 4 | 5 | | | | 62 | 19 | 20 | 309 | 90 | 399 | 23 |
| 1978 | 225 | 68 | 69 | 7 | 3 | 2 | | 3 | 1 | 16 | 9 | 6 | | | | 54 | 33 | 21 | 305 | 117 | 422 | 28 |
| 1979 | 228 | 81 | 71 | 7 | 3 | 2 | 2 | 1 | 1 | 17 | 9 | 6 | | | | 42 | 40 | 19 | 301 | 134 | 435 | 31 |
| 1980 | 224 | 75 | 64 | 5 | 5 | 2 | 1 | 2 | 1 | 11 | 16 | 6 | | | | 50 | 35 | 18 | 315 | 150 | 465 | 32 |
| 1981 | 192 | 113 | 70 | 8 | 9 | 4 | | 2 | 0 | 6 | 8 | 3 | | | | 64 | 31 | 22 | 271 | 163 | 434 | 38 |
| 1982 | 189 | 93 | 62 | 2 | 3 | 1 | 2 | 4 | 1 | 2 | 4 | 1 | 1 | | 0.2 | 87 | 44 | 29 | 293 | 165 | 458 | 36 |
| 1983 | 183 | 99 | 66 | 1 | 1 | 0 | 1 | 3 | 1 | 6 | 4 | 2 | | | | 58 | 30 | 21 | 277 | 149 | 426 | 35 |
| 1984 | 168 | 86 | 64 | 3 | 5 | 2 | 1 | 3 | 1 | 12 | 4 | 4 | | | | 53 | 38 | 23 | 253 | 141 | 394 | 36 |
| 1985 | 134 | 81 | 64 | 2 | 8 | 3 | 2 | 1 | 1 | 8 | 3 | 3 | | | | 63 | 35 | 29 | 210 | 128 | 338 | 38 |
| 1986 | 166 | 116 | 68 | 6 | | 1 | 3 | 5 | 2 | 5 | 2 | 2 | 1 | | 0.2 | 64 | 47 | 27 | 245 | 170 | 415 | 41 |
| **PhD Degrees** | | | | | | | | | | | | | | | | | | | | | | |
| 1972 | 110 | 6 | 69 | 2 | | 1 | | | | | | | | | | 42 | 6 | 29 | 155 | 13 | 168 | 8 |
| 1973 | 120 | 9 | 69 | 4 | | 2 | 1 | | 1 | 3 | | 2 | | | | 44 | 6 | 27 | 172 | 15 | 187 | 8 |
| 1974 | 109 | 12 | 66 | 3 | | 2 | 1 | | 1 | 4 | 1 | 3 | | | | 47 | 6 | 29 | 165 | 19 | 184 | 10 |
| 1975 | 99 | 10 | 58 | 1 | 1 | 1 | 2 | 2 | 2 | 6 | 1 | 4 | | | | 56 | 10 | 35 | 165 | 24 | 189 | 13 |
| 1976 | 108 | 10 | 62 | | | | 1 | | 1 | 7 | 5 | 6 | | | | 38 | 7 | 24 | 163 | 26 | 189 | 14 |
| 1977 | 91 | 8 | 60 | 2 | | 1 | 1 | | 1 | 5 | | 3 | | 1 | 0.6 | 48 | 10 | 35 | 147 | 19 | 166 | 11 |
| 1978 | 106 | 10 | 65 | 1 | | 1 | | 1 | 1 | 8 | 1 | 5 | | | | 40 | 8 | 27 | 158 | 20 | 178 | 11 |
| 1979 | 85 | 13 | 64 | 1 | | 1 | | | | 4 | 2 | 4 | | | | 33 | 13 | 30 | 125 | 28 | 153 | 18 |
| 1980 | 96 | 16 | 59 | 3 | | 2 | 1 | | 1 | 10 | 2 | 6 | | | | 43 | 15 | 31 | 155 | 34 | 189 | 18 |
| 1981 | 112 | 21 | 74 | 1 | | 1 | 1 | | 1 | 6 | 2 | 4 | | | | 32 | 5 | 21 | 152 | 28 | 180 | 16 |
| 1982 | 105 | 21 | 69 | 1 | | 1 | 1 | | 1 | 2 | 1 | 2 | | | | 36 | 14 | 27 | 146 | 36 | 182 | 20 |
| 1983 | 104 | 28 | 63 | | | | 1 | | 0 | 6 | 3 | 4 | | | | 40 | 22 | 30 | 154 | 54 | 208 | 26 |
| 1984 | 105 | 30 | 59 | 2 | | 1 | 3 | 2 | 3 | 11 | 2 | 6 | | | | 45 | 19 | 28 | 174 | 53 | 227 | 23 |
| 1985 | 106 | 34 | 60 | 2 | | 1 | 1 | 1 | 1 | 6 | 4 | 4 | 1 | | 0.6 | 59 | 18 | 33 | 175 | 57 | 232 | 25 |
| 1986 | 112 | 48 | 62 | 2 | | 1 | 1 | | 0 | 4 | 2 | 2 | | | | 73 | 18 | 35 | 192 | 68 | 260 | 26 |

(1) Includes other American minorities.

FIELD: Pharmacy

SOURCE: Report on Enrollment in Schools and Colleges of Pharmacy, 1973-74 and Graduate Enrollment Data, October 1973 and Fall 1977; Graduate Study in Member Colleges, 1974-75; Enrollment Report on Professional Degree Programs in Pharmacy, Fall 1976 through 1986, and Degrees Conferred by Schools and colleges of Pharmacy, 1975-76 through 1985-86, American Association of Colleges of Pharmacy

## TABLE 8-33

COMBINED ENROLLMENTS OF THE FINAL THREE YEARS IN U.S. SCHOOLS OF PHARMACY BY SEX 1968-69 THRU 1986-87 AND BACHELOR GRADUATES IN PHARMACY BY SEX, 1968-69 THRU 1985-86

| ACADEMIC YEAR | TOTAL | Men | Women | % W | BACHELOR GRADUATES | | |
|---|---|---|---|---|---|---|---|
| | | | | | TOTAL | Women | % W |
| 1968-69* | 14,753 | 12,069 | 2,684 | 18.2 | 4,031 | 656 | 16.3 |
| 1969-70 | 15,292 | 12,104 | 3,188 | 20.8 | 4,366 | 792 | 18.1 |
| 1970-71* | 15,326 | 11,956 | 3,370 | 22.0 | 4,356 | 876 | 20.1 |
| 1971-72 | 16,808 | 12,621 | 4,187 | 24.9 | 4,416 | 997 | 22.6 |
| 1972-73 | 18,956 | 13,936 | 5,020 | 26.5 | 4,745 | 1,150 | 24.2 |
| 1973-74 | 21,287 | 15,258 | 6,029 | 28.3 | 5,414 | 1,415 | 26.1 |
| 1974-75 | 23,235 | 16,168 | 7,067 | 30.4 | 6,246 | 1,685 | 27.0 |
| 1975-76 | 24,416 | 16,303 | 8,113 | 33.2 | 6,994 | 2,057 | 29.4 |
| 1976-77 | 24,082 | 15,226 | 8,856 | 36.8 | 7,649 | 2,541 | 33.2 |
| 1977-78 | 23,884 | 14,538 | 9,346 | 39.1 | 7,450 | 2,715 | 36.5 |
| 1978-79 | 23,649 | 13,636 | 9,442 | 39.9 | 7,095 | 2,835 | 40.0 |
| 1979-80 | 23,074 | 13,028 | 10,046 | 43.5 | 6,985 | 2,831 | 40.5 |
| 1980-81 | 22,093 | 11,839 | 10,254 | 46.4 | 6,908 | 3,144 | 45.5 |
| 1981-82 | 20,468 | 10,527 | 9,941 | 48.6 | 6,448 | 3,031 | 47.0 |
| 1982-83 | 19,350 | 9,511 | 9,839 | 50.8 | 5,919 | 2,925 | 49.4 |
| 1983-84 | 18,831 | 8,932 | 9,899 | 52.6 | 5,547 | 2,720 | 49.0 |
| 1984-85 | 16,772 | 7,722 | 9,150 | 54.6 | 5,144 | 2,788 | 54.2 |
| 1985-86 | 19,098 | 8,396 | 10,702 | 56.0 | 5,190 | 2,820 | 54.3 |
| 1986-87 | 20,073 | 8,446 | 11,627 | 57.9 | | | |

* Excludes University of Puerto Rico.

SOURCE: Report on Enrollment in Schools and Colleges of Pharmacy, 1973-74 and Graduate Enrollment Data, October 1973 and Fall 1977; Graduate Study in Member Colleges, 1974-75; Enrollment Report on Professional Degree Programs in Pharmacy, Fall 1976, 1978, 1979, 1980, 1981, 1982, 1983, 1984 and 1986, American Association of Colleges of Pharmacy

## TABLE 8-34

TOTAL FULL-TIME ENROLLMENT IN THE FINAL THREE YEARS IN PHARMACY SCHOOLS PROFESSIONAL DEGREE PROGRAMS BY SEX AND MINORITY GROUP, FALL 1974-FALL 1986

| | Black | | Hispanic American* | | Native American | | Asian American | | Other American Minority | | Non-American Minority | | TOTAL MINORITY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FALL | M | F | M | F | M | F | M | F | M | F | M | F | M | F | TOTAL |
| 1974 | 433 | 294 | 357 | 454 | 26 | 6 | 398 | 249 | 35 | 8 | 735 | 341 | 1,984 | 1,352 | 3,336 |
| 1975 | 488 | 427 | 418 | 510 | 26 | 10 | 407 | 278 | 60 | 35 | 728 | 289 | 2,127 | 1,549 | 3,676 |
| 1976 | 447 | 491 | 380 | 582 | 26 | 11 | 422 | 303 | 20 | 16 | 565 | 237 | 1,860 | 1,670 | 3,530 |
| 1977 | 453 | 531 | 344 | 627 | 32 | 7 | 420 | 341 | 28 | 20 | 522 | 288 | 1,799 | 1,814 | 3,613 |
| 1978 | 338 | 554 | 338 | 609 | 21 | 13 | 488 | 392 | 36 | 35 | 459 | 248 | 1,690 | 1,851 | 3,541 |
| 1979 | 410 | 548 | 339 | 585 | 23 | 13 | 510 | 461 | 35 | 30 | 476 | 238 | 1,793 | 1,875 | 3,668 |
| 1980 | 381 | 564 | 360 | 574 | 21 | 15 | 497 | 538 | 23 | 18 | 520 | 320 | 1,802 | 2,029 | 3,831 |
| 1981 | 378 | 554 | 303 | 484 | 25 | 13 | 464 | 576 | 33 | 33 | 518 | 541 | 1,721 | 2,001 | 3,722 |
| 1982 | 389 | 546 | 315 | 469 | 21 | 15 | 425 | 647 | 42 | 44 | 628 | 402 | 1,820 | 2,123 | 3,943 |
| 1983 | 419 | 600 | 318 | 469 | 20 | 22 | 446 | 676 | 31 | 50 | 638 | 456 | 1,872 | 2,273 | 4,145 |
| 1984 | 361 | 606 | 269 | 434 | 19 | 17 | 229 | 369 | 13 | 27 | 547 | 398 | 1,438 | 1,851 | 3,289 |
| 1986° | 474 | 997 | 323 | 567 | 14 | 21 | 352 | 642 | | | 726 | 649 | 1,889 | 2,876 | 4,765 |

*Includes University of Puerto Rico. °Includes all years

FIELD: Pharmacy

SOURCE: Enrollments in Schools and Colleges of Pharmacy 1986-87, American Association of Colleges of Pharmacy, 1987

## TABLE 8-35

### FULL TIME GRADUATE ENROLLMENTS IN PHARMACY BY PROGRAM TYPE, LEVEL, ETHNICITY AND SEX, 1986

| | Pharmaceutics/ Pharmacy | | | | Pharm. Chem./ Pharmacogmosy | | | | Pharmachology | | | | Pharmacy Administration | | | | Pharmacy Practice | | | | TOTALS(1) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAs | %MAs | PhDs | %PhDs | MAs | %MAs | PhDs | %PhDs | MAs | %MAs | PhDs | %PhDs | MAs | %MAs | PhDs | %PhDs | MAs | %MAs | PhDs | %PhDs | MAs | %MAs | PhDs | %PhDs |
| WHITE | 52 | 27.7 | 250 | 43.1 | 66 | 47.8 | 310 | 53.0 | 87 | 59.6 | 258 | 68.8 | 78 | 70.3 | 47 | 64.4 | 74 | 78.7 | 21 | 67.7 | 357 | 52.7 | 886 | 53.9 |
| Men | 33 | 27.3 | 164 | 43.0 | 36 | 47.4 | 215 | 53.1 | 52 | 60.5 | 159 | 70.7 | 37 | 66.1 | 31 | 72.1 | 43 | 89.6 | 14 | 66.7 | 201 | 29.7 | 583 | 35.5 |
| Women | 19 | 28.4 | 86 | 43.2 | 30 | 48.4 | 95 | 52.8 | 35 | 58.3 | 99 | 66.0 | 41 | 74.5 | 16 | 53.3 | 31 | 67.4 | 7 | 70.0 | 156 | 23.0 | 303 | 18.4 |
| BLACK | 6 | 3.2 | 10 | 1.7 | 4 | 2.9 | 4 | 0.7 | 9 | 6.2 | 11 | 2.9 | 1 | 0.9 | 3 | 4.1 | 2 | 2.1 | 1 | 3.2 | 22 | 3.2 | 29 | 1.8 |
| Men | 4 | 3.3 | 3 | 0.8 | 3 | 3.9 | 4 | 1.0 | 5 | 5.8 | 6 | 2.7 | 1 | 1.8 | | | | | 1 | 4.8 | 13 | 1.9 | 14 | 0.9 |
| Women | 2 | 3.0 | 7 | 3.5 | 1 | 1.6 | | | 4 | 6.7 | 5 | 3.3 | | | 3 | 10.0 | 2 | 4.3 | | | 9 | 1.3 | 15 | 0.9 |
| HISPANIC | 3 | 1.6 | 4 | 0.7 | 4 | 2.9 | 7 | 1.2 | 1 | 0.7 | 4 | 1.1 | 3 | 2.7 | 1 | 1.4 | 1 | 1.1 | 1 | 3.2 | 12 | 1.8 | 17 | 1.0 |
| Men | 1 | 0.8 | 2 | 0.5 | 2 | 2.6 | 6 | 1.5 | | | 3 | 1.3 | 1 | 1.8 | | | | | 1 | 4.8 | 4 | 0.6 | 12 | 0.7 |
| Women | 2 | 3.0 | 2 | 1.0 | 2 | 3.2 | 1 | 0.6 | 1 | 1.7 | 1 | 0.7 | 2 | 3.6 | 1 | 3.3 | 1 | 2.2 | | | 8 | 1.2 | 5 | 0.3 |
| ASIAN | 6 | 3.2 | 10 | 1.7 | | | 24 | 4.1 | 7 | 4.8 | 13 | 3.5 | 3 | 2.7 | | | 1 | 1.1 | | | 17 | 2.5 | 47 | 2.9 |
| Men | 1 | 0.8 | 7 | 1.8 | | | 15 | 3.7 | 4 | 4.7 | 5 | 2.2 | | | | | | | | | 5 | 0.7 | 27 | 1.6 |
| Women | 5 | 7.5 | 3 | 1.5 | | | 9 | 5.0 | 3 | 5.0 | 8 | 5.3 | 3 | 5.5 | | | 1 | 2.2 | | | 12 | 1.8 | 20 | 1.2 |
| INDIAN | | | | | | | 1 | 0.2 | | | | | | | | | | | | | | | 1 | 0.1 |
| Men | | | | | | | | | | | | | | | | | | | | | | | | |
| Women | | | | | | | 1 | 0.6 | | | | | | | | | | | | | | | 1 | 0.1 |
| FOREIGN | 121 | 64.4 | 306 | 52.8 | 64 | 46.4 | 239 | 40.9 | 42 | 28.8 | 89 | 23.7 | 26 | 23.4 | 22 | 30.1 | 16 | 17.0 | 8 | 25.8 | 269 | 39.7 | 664 | 40.4 |
| Men | 82 | 67.8 | 205 | 53.8 | 35 | 46.1 | 165 | 40.7 | 25 | 29.1 | 52 | 23.1 | 17 | 30.4 | 12 | 27.9 | 5 | 10.4 | 5 | 23.8 | 164 | 24.2 | 439 | 26.7 |
| Women | 39 | 58.2 | 101 | 50.8 | 29 | 46.8 | 74 | 41.1 | 17 | 28.3 | 37 | 24.7 | 9 | 16.4 | 10 | 33.3 | 11 | 23.9 | 3 | 30.0 | 105 | 15.5 | 225 | 13.7 |
| TOTALS | 188 | 100 | 580 | 100 | 138 | 100 | 585 | 100 | 146 | 100 | 375 | 100 | 111 | 100 | 73 | 100 | 94 | 100 | 31 | 100 | 677 | 100 | 1644 | 100 |
| Men | 121 | 100 | 381 | 100 | 76 | 100 | 405 | 100 | 86 | 100 | 225 | 100 | 56 | 100 | 43 | 100 | 48 | 100 | 21 | 100 | 387 | 57 | 1075 | 65 |
| Women | 67 | 100 | 199 | 100 | 62 | 100 | 180 | 100 | 60 | 100 | 150 | 100 | 55 | 100 | 30 | 100 | 46 | 100 | 10 | 100 | 290 | 43 | 569 | 35 |

(1) Includes other American minorities.

FIELD: Podiatry

SOURCE: Minorities and Women in the Health Fields, Health Resources Administration, U.S. Dept. of HEW, May 1974; Women in Health Careers, U.S. Dept. of HEW; and data from American Association of Colleges of Podiatric Medicine

## TABLE 8-36

**TOTAL ENROLLMENTS IN SCHOOLS OF PODIATRY IN THE UNITED STATES BY SEX, 1969-70 THRU 1984-85**

| ACADEMIC YEAR | NUMBER OF STUDENTS | | | | |
|---|---|---|---|---|---|
| | TOTAL | MEN | % MEN | WOMEN | % WOMEN |
| 1969-70 | 1,095 | 1,085 | 99.1 | 10 | 0.9 |
| 1970-71 | 1,148 | 1,132 | 98.6 | 16 | 1.4 |
| 1971-72 | 1,268 | 1,252 | 98.7 | 16 | 1.3 |
| 1972-73 | 1,401 | 1,380 | 98.5 | 21 | 1.5 |
| 1973-74 | 1,623 | 1,583 | 97.6 | 40 | 2.4 |
| 1974-75 | 1,836 | 1,777 | 96.8 | 59 | 3.2 |
| 1975-76 | 2,081 | 1,981 | 95.2 | 100 | 4.8 |
| 1976-77 | 2,204 | 2,047 | 92.9 | 157 | 7.1 |
| 1977-78 | 2,388 | 2,129 | 89.2 | 259 | 10.8 |
| 1978-79 | 2,498 | 2,230 | 89.3 | 268 | 10.7 |
| 1979-80 | 2,531 | 2,226 | 87.9 | 305 | 12.1 |
| 1980-81 | 2,577 | 2,271 | 88.1 | 306 | 11.9 |
| 1981-82 | 2,584 | 2,223 | 86.0 | 361 | 14.0 |
| 1982-83 | 2,608 | 2,180 | 83.6 | 428 | 16.4 |
| 1983-84 | 2,556 | 2,080 | 81.4 | 476 | 18.6 |
| 1984-85 | 2,616 | 2,047 | 78.3 | 569 | 21.7 |
| 1985-86 | 2,749 | 2,129 | 77.4 | 620 | 22.6 |
| 1986-87 | 2,832 | 2,160 | 76.3 | 672 | 23.7 |

## TABLE 8-37

**MINORITY ENROLLMENT IN COLLEGES OF PODIATRIC MEDICINE, FALL 1978-1986**

| YEAR | Total Student | Black No. | Black % | Hispanic No. | Hispanic % | Am. Indian No. | Am. Indian % | Asian/Pac No. | Asian/Pac % | Total Min. No. | Total Min. % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978-79 | 2498 | 77 | 3.1 | 27 | 1.1 | 8 | 0.3 | 51 | 2.0 | 163 | 6.5 |
| 1979-80 | 2531 | 93 | 3.7 | 28 | 1.1 | 5 | 0.2 | 63 | 2.5 | 189 | 7.5 |
| 1980-81 | 2577 | 110 | 4.3 | 32 | 1.2 | 6 | 0.2 | 68 | 2.6 | 216 | 8.4 |
| 1981-82 | 2584 | 125 | 4.8 | 40 | 1.5 | 5 | 0.2 | 68 | 2.6 | 238 | 9.2 |
| 1982-83 | 2608 | 154 | 5.9 | 33 | 1.3 | 5 | 0.2 | 75 | 2.9 | 267 | 10.2 |
| 1983-84 | 2556 | 170 | 6.7 | 41 | 1.6 | 9 | 0.4 | 68 | 2.7 | 288 | 11.3 |
| 1984-85 | 2616 | 185 | 7.1 | 57 | 2.2 | 11 | 0.4 | 99 | 3.8 | 352 | 13.5 |
| 1985-86 | 2749 | 208 | 7.6 | 71 | 2.6 | 14 | 0.5 | 110 | 4.0 | 403 | 14.7 |
| 1986-87 | 2832 | 216 | 7.6 | 77 | 2.7 | 6 | 0.2 | 127 | 4.5 | 426 | 15.0 |
| TOTALS | 23551 | 1338 | 5.7 | 406 | 1.7 | 69 | 0.3 | 729 | 3.1 | 2542 | 10.8 |

FIELD: Nursing

SOURCE: Earned Degrees Conferred Series, 1969-70 thru 1985-86, Department of Education Center for Statistics

TABLE 8-38

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1969-70 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1969-70 | 11,280 | 11,120 | 98.6 | 1,549 | 1,531 | 98.8 | 11 | 10 | 90.9 |
| 1970-71 | 12,283 | 12,029 | 97.9 | 1,542 | 1,511 | 98.0 | 7 | 6 | 85.7 |
| 1971-72 | 13,245 | 12,902 | 97.4 | 1,846 | 1,815 | 98.3 | 10 | 10 | 100.0 |
| 1972-73 | 15,526 | 15,063 | 97.0 | 2,093 | 1,983 | 94.7 | 17 | 13 | 76.5 |
| 1973-74 | 19,409 | 18,653 | 96.1 | 2,293 | 2,229 | 97.2 | 14 | 14 | 100.0 |
| 1974-75 | 23,813 | 22,709 | 95.4 | 2,220 | 2,154 | 97.0 | 16 | 16 | 100.0 |
| 1975-76 | 26,846 | 25,484 | 94.9 | 3,058 | 2,968 | 97.1 | 16 | 16 | 100.0 |
| 1976-77 | 28,402 | 26,870 | 94.6 | 3,257 | 3,155 | 96.9 | 24 | 22 | 91.6 |
| 1977-78 | 30,307 | 28,661 | 94.6 | 3,812 | 3,671 | 96.3 | 56 | 53 | 94.6 |
| 1978-79 | 31,808 | 30,002 | 94.3 | 4,256 | 4,088 | 96.1 | 68 | 65 | 95.6 |
| 1970-80 | 32,852 | 31,054 | 94.5 | 4,637 | 4,464 | 96.3 | 118 | 116 | 98.3 |
| 1980-81 | 32,794 | 31,140 | 95.0 | 5,096 | 4,899 | 96.1 | 113 | 109 | 96.5 |
| 1981-82 | 33,177 | 31,482 | 94.9 | 5,312 | 4,034 | 94.8 | 134 | 128 | 95.5 |
| 1982-83 | 31,442 | 29,965 | 95.3 | 4,451 | 4,298 | 96.6 | 124 | 117 | 94.4 |
| 1983-84 | 33,092 | 31,263 | 94.5 | 5,744 | 5,296 | 92.2 | 220 | 204 | 92.7 |
| 1984-85 | 33,654 | 31,717 | 94.2 | 5,761 | 5,303 | 92.1 | 273 | 246 | 90.1 |
| 1985-86 | 34,097 | 32,139 | 94.3 | 6,050 | 5,571 | 92.1 | 277 | 257 | 92.8 |
| TOTAL | 444,027 | 422,253 | 95.1 | 62,977 | 59,520 | 94.5 | 1,498 | 1,402 | 93.6 |

FIELD: Nursing

SOURCE: Minorities and Women in the Health Fields, 1987 Edition, Health Resources and Services Administration of the Public Health Service

## TABLE 8-39

FIRST YEAR ENROLLMENTS AND GRADUATES OF REGISTERED NURSE AND PRACTICAL NURSE TRAINING PROGRAMS BY TYPE OF PROGRAM AND SEX, SELECTED YEARS, 1971-72 - 1984-85

| Academic year | First-year enrollment | | | Percent male of first-year enrollment | Graduates | | | Percent male of total graduates |
|---|---|---|---|---|---|---|---|---|
| | Both sexes | Female | Male | | Total | Female | Male | |
| | All registered nurse programs | | | | All registered nurse programs | | | |
| 1971-72 | 85,077 | 79,907 | 5,170 | 6.1 | 44,504 | 42,811 | 1,693 | 3.8 |
| 1974-75 | 89,706 | 83,510 | 6,196 | 6.9 | 62,056 | 58,249 | 3,807 | 6.1 |
| 1977-78 | 101,438 | 95,055 | 6,383 | 6.3 | 70,432 | 66,530 | 3,902 | 5.5 |
| 1980-81 | 102,540 | 95,966 | 6,574 | 6.4 | 68,520 | 64,984 | 3,536 | 5.2 |
| 1983-84 | 113,303 | 105,332 | 7,971 | 7.0 | 74,076 | 69,790 | 4,286 | 5.8 |
| 1984-85 | 101,493 | 95,149 | 6,344 | 6.3 | 68,874 | 64,966 | 3,908 | 5.7 |
| | RN baccalaureate degree programs | | | | RN baccalaureate degree programs | | | |
| 1971-72 | 24,266 | 22,880 | 1,386 | 5.7 | 9,841 | 9,563 | 278 | 2.8 |
| 1974-75 | 29,479 | 27,563 | 1,916 | 6.5 | 17,666 | 16,728 | 938 | 5.3 |
| 1977-78 | 35,442 | 33,240 | 2,202 | 6.2 | 23,287 | 22,116 | 1,171 | 5.0 |
| 1980-81 | 32,548 | 30,563 | 1,985 | 6.1 | 22,674 | 21,533 | 1,141 | 5.0 |
| 1983-84 | 37,323 | 34,939 | 2,384 | 6.4 | 23,107 | 21,684 | 1,423 | 6.2 |
| 1984-85 | 33,296 | 31,324 | 1,972 | 5.9 | 21,469 | 20,271 | 1,198 | 5.6 |
| | RN associate degree programs | | | | RN associate degree programs | | | |
| 1971-72 | 33,308 | 30,864 | 2,444 | 7.3 | 17,062 | 16,165 | 897 | 5.3 |
| 1974-75 | 38,581 | 35,422 | 3,159 | 8.2 | 25,395 | 23,382 | 2,013 | 7.9 |
| 1977-78 | 46,755 | 43,601 | 3,154 | 6.7 | 32,343 | 30,267 | 2,076 | 6.4 |
| 1980-81 | 53,127 | 49,400 | 3,727 | 7.0 | 33,653 | 31,749 | 1,904 | 5.7 |
| 1983-84 | 58,740 | 54,028 | 4,712 | 8.0 | 39,673 | 37,348 | 2,325 | 5.7 |
| 1984-85 | 54,134 | 50,594 | 3,540 | 6.5 | 36,037 | 33,836 | 2,201 | 6.1 |
| | RN diploma programs | | | | RN diploma programs | | | |
| 1971-72 | 27,503 | 26,163 | 1,340 | 4.9 | 17,601 | 17,083 | 518 | 2.9 |
| 1974-75 | 21,646 | 20,525 | 1,121 | 5.2 | 18,995 | 18,139 | 856 | 4.5 |
| 1977-78 | 19,241 | 18,214 | 1,027 | 5.3 | 14,802 | 14,147 | 655 | 4.4 |
| 1980-81 | 16,865 | 16,003 | 862 | 5.1 | 12,193 | 11,702 | 491 | 4.0 |
| 1983-84 | 17,240 | 16,365 | 875 | 5.1 | 11,296 | 10,758 | 538 | 4.8 |
| 1984-85 | 14,063 | 13,231 | 832 | 5.9 | 11,368 | 10,859 | 509 | 4.5 |
| | All practical nurse programs | | | | All practical nurse programs | | | |
| 1971-72 | 51,815 | 49,064 | 2,751 | 5.3 | 35,752 | 34,121 | 1,631 | 4.6 |
| 1974-75 | 46,530 | 43,779 | 2,751 | 5.9 | 34,748 | 33,568 | 1,180 | 3.4 |
| 1977-78 | 53,002 | 50,637 | 2,365 | 4.5 | 39,396 | 38,001 | 1,395 | 3.5 |
| 1980-81 | 51,335 | 48,572 | 2,763 | 5.4 | 35,980 | 34,577 | 1,403 | 3.9 |
| 1983-84 | 48,950 | 45,780 | 3,170 | 6.5 | 36,305 | 34,411 | 1,894 | 5.2 |
| 1984-85 | NA | NA | NA | -- | NA | NA | NA | -- |

1/ Data are based on those students in schools responding to question on minority enrollment, male enrollment, or both.

NA = Data not available

FIELD: Nursing

SOURCE: Minorities and Women in the Health Fields, 1987 Edition, Health Resources and Services Administration of the Public Health Service

## TABLE 8-40

FIRST YEAR ENROLLMENT IN NURSING PROGRAMS BY TYPE OF PROGRAM AND RACE/ETHNICITY, SELECTED YEARS 1971-72 - 1984-85

| Academic year | TOTAL FIRST-YEAR ENROLLMENT | Racial/ethnic category 1/ | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | First-year minority enrollment | | Black | | Hispanic | | Other minority | |
| | | Number | Percent of total first-year enrollment | Number | Percent of total first-year enrollment | Number | Percent of total first-year enrollment | Number | Percent of total first-year enrollment |
| | All registered nurse programs | | | | | | | | |
| 1971-72 | 91,896 | 9,889 | 10.8 | 7,088 | 7.7 | 1,866 | 2.0 | 935 | 1.0 |
| 1974-75 | 89,706 | 11,322 | 12.6 | 8,159 | 9.1 | 2,080 | 2.3 | 1,083 | 1.2 |
| 1977-78 | 101,438 | 11,212 | 11.2 | 7,313 | 7.2 | 2,520 | 2.5 | 1,379 | 1.4 |
| 1980-81 | 102,540 | 13,799 | 13.5 | 8,537 | 8.3 | 3,515 | 3.4 | 1,747 | 1.7 |
| 1983-84 | 113,303 | 14,647 | 12.9 | 9,226 | 8.1 | 2,877 | 2.5 | 2,544 | 2.3 |
| 1984-85 | 101,493 | 12,862 | 12.7 | 8,096 | 8.0 | 2,495 | 2.5 | 2,271 | 2.2 |
| | RN baccalaureate degree programs | | | | | | | | |
| 1971-72 | 26,758 | 3,509 | 13.1 | 2,407 | 9.0 | 667 | 2.5 | 435 | 1.6 |
| 1974-75 | 29,479 | 4,911 | 16.7 | 3,650 | 12.4 | 807 | 2.7 | 454 | 1.5 |
| 1977-78 | 35,442 | 4,366 | 12.3 | 2,905 | 8.2 | 970 | 2.7 | 491 | 1.4 |
| 1980-81 | 32,548 | 5,390 | 16.6 | 2,797 | 8.6 | 1,813 | 5.6 | 780 | 2.4 |
| 1983-84 | 37,323 | 5,484 | 14.7 | 3,521 | 9.4 | 893 | 2.4 | 1,070 | 2.2 |
| 1984-85 | 33,296 | 3,855 | 11.6 | 2,444 | 7.3 | 672 | 2.0 | 739 | 2.2 |
| | RN associate degree programs | | | | | | | | |
| 1971-72 | 35,863 | 4,958 | 13.8 | 3,550 | 9.9 | 1,034 | 2.9 | 374 | 1.0 |
| 1974-75 | 38,581 | 5,096 | 13.2 | 3,495 | 9.1 | 1,069 | 2.8 | 532 | 1.4 |
| 1977-78 | 46,755 | 5,515 | 11.8 | 3,580 | 7.6 | 1,318 | 2.8 | 617 | 1.3 |
| 1980-81 | 53,127 | 6,993 | 13.2 | 4,668 | 8.8 | 1,477 | 2.8 | 848 | 1.6 |
| 1983-84 | 58,740 | 7,779 | 13.2 | 4,784 | 8.1 | 1,072 | 2.9 | 1,293 | 2.2 |
| 1984-85 | 54,134 | 7,620 | 14.1 | 4,738 | 8.8 | 1,568 | 2.9 | 1,314 | 2.4 |
| | RN diploma programs | | | | | | | | |
| 1971-72 | 29,275 | 1,422 | 4.9 | 1,131 | 3.9 | 165 | 0.6 | 126 | 0.4 |
| 1974-75 | 21,646 | 1,315 | 6.1 | 1,014 | 4.7 | 204 | 0.9 | 97 | 0.4 |
| 1977-78 | 19,241 | 1,331 | 6.9 | 828 | 4.3 | 232 | 1.2 | 271 | 1.4 |
| 1980-81 | 16,865 | 1,416 | 8.4 | 1,072 | 6.4 | 225 | 1.3 | 119 | 0.7 |
| 1983-84 | 17,240 | 1,384 | 8.0 | 921 | 5.3 | 282 | 1.6 | 181 | 1.1 |
| 1984-85 | 14,063 | 1,387 | 9.9 | 914 | 6.5 | 255 | 1.8 | 218 | 1.5 |
| | All practical nurse programs | | | | | | | | |
| 1971-72 | 57,567 | 11,183 | 19.4 | 8,545 | 14.8 | 1,965 | 3.4 | 673 | 1.2 |
| 1974-75 | 46,530 | 8,313 | 17.9 | 5,795 | 12.5 | 1,927 | 4.1 | 591 | 1.3 |
| 1977-78 | 53,002 | 8,279 | 15.6 | 5,883 | 11.1 | 1,655 | 3.1 | 741 | 1.4 |
| 1980-81 | 51,335 | 8,993 | 17.5 | 6,252 | 12.2 | 2,010 | 3.9 | 731 | 1.4 |
| 1983-84 | 59,439 | 10,523 | 17.7 | 7,732 | 13.0 | 1,766 | 3.0 | 1,025 | 1.7 |
| 1984-85 | NA | NA | -- | NA | -- | NA | -- | NA | -- |

1/ Based on those students in schools responding to question on minority enrollment, male enrollment, or both.

NA = Data not yet available

FIELD: Nursing

SOURCE: Minorities and Women in the Health Fields, 1987 Edition, Health Resources and Services Administration of the Public Health Service

## TABLE 8-41

ESTIMATED NUMBER OF EMPLOYED, REGISTERED NURSES IN THE U.S. BY SEX, NOVEMBER 1984

| Geographic area | Estimated number 1/ | | | Percent Male |
|---|---|---|---|---|
| | All employed R.N.'s | Male | Female | |
| All employed R.N.'s | 1,485,725 | 49,658 | 1,436,067 | 3.3 |
| NORTHEAST | 396,954 | 10,113 | 386,841 | 2.5 |
| New England | 119,914 | 3,111 | 116,803 | 2.6 |
| Middle Atlantic | 277,040 | 7,002 | 270,038 | 2.5 |
| NORTH CENTRAL | 402,919 | 10,705 | 392,213 | 2.7 |
| East North Central | 277,280 | 6,659 | 270,620 | 2.4 |
| West North Central | 125,639 | 4,046 | 121,593 | 3.2 |
| SOUTH | 413,671 | 16,415 | 397,256 | 4.0 |
| South Atlantic | 227,724 | 7,065 | 220,659 | 3.1 |
| East South Central | 72,429 | 3,204 | 69,225 | 4.4 |
| West South Central | 113,518 | 6,146 | 107,372 | 5.4 |
| WEST | 272,182 | 12,424 | 259,757 | 4.6 |
| Mountain | 72,448 | 2,931 | 69,516 | 4.1 |
| Pacific | 199,734 | 9,493 | 190,241 | 4.8 |

1/ Rows and columns may not add to totals due to rounding.

FIELD: Health Services Administration

SOURCE: Earned Degrees Conferred Series, 1969-70 thru 1985-86, Department of Education Center for Statistics

TABLE 8-42
DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1968-69 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1968-69 | 37 | 3 | 8.1 | 403 | 59 | 14.6 | 2 | 1 | 50.0 |
| 1969-70 | 32 | 6 | 18.8 | 479 | 64 | 13.4 | 7 | 0 | 0.0 |
| 1970-71 | 60 | 4 | 6.7 | 518 | 64 | 12.4 | 14 | 0 | 0.0 |
| 1971-72 | 126 | 55 | 43.6 | 677 | 102 | 15.1 | 12 | 0 | 0.0 |
| 1972-73 | 121 | 16 | 13.2 | 743 | 82 | 11.0 | 12 | 2 | 16.7 |
| 1973-74 | 185 | 32 | 17.3 | 990 | 206 | 20.8 | 21 | 4 | 19.0 |
| 1974-75 | 306 | 99 | 32.4 | 997 | 196 | 19.6 | 13 | 0 | 0.0 |
| 1975-76 | 421 | 150 | 35.6 | 1,139 | 278 | 24.4 | 11 | 0 | 0.0 |
| 1976-77 | 668 | 320 | 47.9 | 1,354 | 355 | 26.2 | 18 | 3 | 16.7 |
| 1977-78 | 1,158 | 716 | 61.8 | 1,565 | 567 | 36.2 | 12 | 2 | 16.7 |
| 1978-79 | 1,338 | 864 | 64.6 | 1,748 | 671 | 38.4 | 16 | 4 | 25.0 |
| 1979-80 | 1,692 | 1,154 | 68.2 | 1,698 | 718 | 42.3 | 13 | 4 | 30.8 |
| 1980-81 | 1,581 | 1,043 | 66.0 | 1,996 | 933 | 46.7 | 12 | 2 | 16.7 |
| 1981-82 | 1,978 | 1,397 | 70.6 | 1,640 | 805 | 49.1 | 20 | 5 | 25.0 |
| 1982-83 | 2,267 | 1,701 | 75.0 | 1,729 | 903 | 52.2 | 14 | 4 | 28.6 |
| 1983-84 | 3,014 | 2,442 | 81.0 | 2,176 | 1,215 | 55.8 | 27 | 12 | 44.4 |
| 1984-85 | 3,171 | 2,494 | 78.7 | 2,384 | 1,378 | 57.8 | 24 | 13 | 54.2 |
| 1985-86 | 3,154 | 2,544 | 80.7 | 2,549 | 1,562 | 61.3 | 26 | 8 | 30.8 |
| TOTAL | 22,309 | 15,040 | 67.4 | 24,785 | 10,158 | 41.0 | 274 | 64 | 23.4 |

FIELD: Medical Laboratory Technologies

SOURCE: Earned Degrees Conferred Series, 1968-69 thru 1985-86, Department of Education Center for Statistics

TABLE 8-43
DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1968-69 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1968-69 | 2,846 | 2,551 | 89.6 | 28 | 23 | 82.1 | 0 | 0 | |
| 1969-70 | 3,228 | 2,823 | 87.5 | 71 | 57 | 80.3 | 0 | 0 | |
| 1970-71 | 3,145 | 2,755 | 87.6 | 72 | 55 | 76.4 | 4 | 1 | 25.0 |
| 1971-72 | 3,407 | 2,880 | 84.5 | 97 | 62 | 63.9 | 0 | 0 | |
| 1972-73 | 3,806 | 3,102 | 81.5 | 95 | 77 | 81.1 | 0 | 0 | |
| 1973-74 | 4,840 | 3,864 | 79.8 | 164 | 95 | 57.9 | 0 | 0 | |
| 1974-75 | 5,087 | 4,005 | 78.7 | 174 | 91 | 52.3 | 0 | 0 | |
| 1975-76 | 5,445 | 4,356 | 80.0 | 266 | 137 | 51.5 | 0 | 0 | |
| 1976-77 | 5,286 | 4,242 | 80.2 | 333 | 184 | 55.3 | 3 | 2 | 66.7 |
| 1977-78 | 5,288 | 4,221 | 79.8 | 292 | 175 | 59.9 | 4 | 1 | 25.0 |
| 1978-79 | 5,235 | 4,143 | 79.1 | 303 | 179 | 59.1 | 1 | 0 | |
| 1979-80 | 5,130 | 4,128 | 80.5 | 231 | 154 | 66.7 | 1 | 1 | 100.0 |
| 1980-81 | 4,896 | 4,012 | 81.9 | 233 | 150 | 64.4 | 1 | 1 | 100.0 |
| 1981-82 | 4,596 | 3,784 | 82.3 | 207 | 131 | 63.3 | 4 | 3 | 75.0 |
| 1982-83 | 3,249 | 2,631 | 81.0 | 144 | 69 | 47.9 | 0 | 0 | |
| 1983-84 | 2,714 | 2,179 | 80.3 | 46 | 33 | 71.7 | 0 | 0 | |
| 1984-85 | 2,720 | 2,222 | 81.7 | 28 | 18 | 64.3 | 1 | 0 | 0.0 |
| 1985-86 | 2,554 | 2,072 | 81.1 | 33 | 25 | 75.8 | 0 | 0 | |
| TOTAL | 73,472 | 59,970 | 81.6 | 2,827 | 1,715 | 60.7 | 19 | 9 | 47.4 |

FIELD: Physical Therapy

SOURCE: Earned Degrees Conferred Series, 1968-69 thru 1985-86
Department of Education Center for Statistics

TABLE 8-44
DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1968-69 - 1985-86

| YEAR | BACHELOR'S Total Both Sexes | BACHELOR'S Women Only | BACHELOR'S % Women | MASTER'S Total Both Sexes | MASTER'S Women Only | MASTER'S % Women |
|---|---|---|---|---|---|---|
| 1968-69 | 1,071 | 922 | 86.1 | 41 | 30 | 73.2 |
| 1969-70 | 1,091 | 922 | 84.5 | 49 | 32 | 65.3 |
| 1970-71 | 1,306 | 1,045 | 80.0 | 75 | 56 | 74.7 |
| 1971-72 | 1,483 | 1,182 | 79.7 | 55 | 30 | 54.5 |
| 1972-73 | 1,756 | 1,381 | 78.6 | 78 | 51 | 65.4 |
| 1973-74 | 1,900 | 1,497 | 78.8 | 111 | 77 | 69.4 |
| 1974-75 | 2,121 | 1,615 | 76.1 | 133 | 85 | 63.9 |
| 1975-76 | 2,091 | 1,620 | 77.5 | 167 | 113 | 67.7 |
| 1976-77 | 2,333 | 1,790 | 76.7 | 162 | 101 | 62.3 |
| 1977-78 | 2,418 | 1,903 | 78.7 | 258 | 184 | 71.3 |
| 1978-79 | 2,651 | 2,079 | 78.4 | 242 | 154 | 63.6 |
| 1979-80 | 2,372 | 1,845 | 77.8 | 282 | 203 | 72.0 |
| 1980-81 | 2,745 | 2,213 | 80.6 | 250 | 186 | 74.4 |
| 1981-82 | 2,736 | 2,200 | 80.4 | 317 | 233 | 73.5 |
| 1982-83 | 2,581 | 2,074 | 80.4 | 303 | 198 | 65.3 |
| 1983-84 | 2,947 | 2,395 | 81.3 | 399 | 289 | 72.4 |
| 1984-85 | 3,129 | 2,503 | 80.0 | 400 | 286 | 71.5 |
| 1985-86 | 3,039 | 2,412 | 79.4 | 405 | 292 | 72.1 |
| TOTAL | 39,770 | 31,598 | 79.5 | 3,707 | 2,600 | 70.1 |

FIELD: Speech-Language Pathology and Audiology

Source: Series on Earned Degrees Conferred, 1970-71 through 1985-86, Center for Statistics, Department of Education

TABLE 8-45

DEGREES AWARDED IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY BY SEX AND LEVEL OF DEGREE, 1970-71 - 1985-86

| YEAR | BACHELOR'S Both Sexes | BACHELOR'S Women Only | BACHELOR'S % Women | MASTER'S Both Sexes | MASTER'S Women Only | MASTER'S % Women | DOCTOR'S Both Sexes | DOCTOR'S Women Only | DOCTOR'S % Women |
|---|---|---|---|---|---|---|---|---|---|
| 1970-71 | 1,427 | 1,251 | 87.7 | 845 | 690 | 81.7 | 70 | 22 | 31.4 |
| 1971-72 | 1,863 | 1,609 | 86.4 | 1,033 | 881 | 85.3 | 58 | 29 | 50.0 |
| 1972-73 | 2,574 | 2,259 | 87.8 | 1,417 | 1175 | 82.9 | 69 | 23 | 33.3 |
| 1973-74 | 3,278 | 2,934 | 89.5 | 1,964 | 1671 | 85.1 | 78 | 28 | 35.9 |
| 1974-75 | 3,732 | 3,345 | 89.6 | 2,377 | 2011 | 84.6 | 71 | 30 | 42.3 |
| 1975-76 | 3,925 | 3,582 | 91.3 | 3,119 | 2724 | 87.3 | 109 | 46 | 42.2 |
| 1976-77 | 3,864 | 3,555 | 92.0 | 3,019 | 2704 | 89.6 | 96 | 49 | 51.0 |
| 1977-78 | 3,551 | 3,247 | 91.4 | 3,190 | 2921 | 91.6 | 121 | 58 | 47.9 |
| 1978-79 | 3,554 | 3,297 | 92.8 | 3,496 | 3180 | 91.0 | 113 | 60 | 53.1 |
| 1979-80 | 3,576 | 3,319 | 92.8 | 3,304 | 3056 | 92.5 | 110 | 56 | 50.9 |
| 1980-81 | 3,445 | 3,225 | 93.6 | 3,226 | 2982 | 92.4 | 112 | 59 | 52.7 |
| 1981-82 | 3,414 | 3,234 | 94.7 | 3,104 | 2895 | 93.3 | 114 | 67 | 58.8 |
| 1982-83 | 2,909 | 2,847 | 97.9 | 2,737 | 2547 | 93.1 | 92 | 61 | 66.3 |
| 1983-84* | 430 | 410 | 95.3 | 171 | 161 | 94.2 | 0 | 0 | 0.0 |
| 1984-85 | 393 | 376 | 95.7 | 241 | 225 | 93.4 | 0 | 0 | 0.0 |
| 1985-86 | 409 | 388 | 94.9 | 254 | 246 | 96.9 | 0 | 0 | 0.0 |
| TOTAL | 42,344 | 38,878 | 91.8 | 33,497 | 30,069 | 89.8 | 1,213 | 588 | 48.5 |

* Redefined as Speech-language pathology and audiology.

FIELD: Public Health

SOURCE: Data compiled by the Association of Schools of Public Health, Washington, D.C., obtained by personal communication

## TABLE 8-46

### TOTAL ENROLLMENT IN SCHOOLS OF PUBLIC HEALTH BY SEX AND MINORITY, ACADEMIC YEARS 1974-75 THROUGH 1986-87 (U.S. Citizens Only)

| Academic Year | Total Students Identified by Sex[1] | Female Students | Percent Female of Total Students Identified by Sex | Total Students Identified by Race[2] | Racial/Ethnic Category | | | | Total Minority | Percent Minority of Total Students Identified by Race |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Black | Hispanic | Asian | Indian | | |
| 1974-75 | 4,980 | 2,307 | 46.3 | 4,515 | 351 | 76** | 156 | 49 | 632 | 14.1 |
| 1975-76 | 5,411 | 2,646 | 48.9 | 5,268 | 348 | 309 | 218 | 59 | 934 | 17.7 |
| 1976-77 | 5,569 | 2,786 | 50.0 | * | * | * | * | * | * | * |
| 1977-78 | 5,781 | 2,999 | 51.9 | * | * | * | * | * | * | * |
| 1978-79 | 6,315 | 3,472 | 55.0 | * | * | * | * | * | * | * |
| 1979-80 | 6,523 | 3,677 | 56.4 | 6,485 | 415 | 173** | 408 | 68 | 1,064 | 16.4 |
| 1980-81 | 5,994 | 3,472 | 57.9 | 5,994 | 379 | 242 | 393 | 88 | 1,102 | 18.4 |
| 1981-82 | 7,366 | 4,350 | 59.1 | 6,504 | 376 | 271 | 335 | 82 | 1,064 | 16.4 |
| 1982-83 | 7,614 | 4,624 | 60.7 | 7,005 | 403 | 359 | 368 | 70 | 1,200 | 17.1 |
| 1983-84 | 8,937 | 5,152 | 58.3 | 6,895 | 357 | 388 | 313 | 59 | 1,117 | 16.2 |
| 1984-85 | 8,956 | 3,627 | 59.5 | 7,641 | 368 | 392 | 302 | 54 | 1,116 | 14.6 |
| 1985-86 | 7,942 | 5,059 | 63.7 | 7,254 | 443 | 452 | 304 | 63 | 1,262 | 17.4 |

[1] Counts of students not identified by sex in the years listed are: 1974-75, 92; 1975-76, 4; 1976-77, 28; 1977-78, 23; 1989-79, 25; 1979-80, 9; 1980-81, 53; 1981-82, 0; 1982-83, 1; 1985-86, 0.

[2] Counts of students not identified by race in the years listed are: 1974-75, 557; 1975-76, 147; 1979-80, 47; 1980-81, 53; 1981-82, 862; 1982-83, 610; 1985-86, 698.

* Not Available

**Puerto Rican not included.

FIELD: Health Sciences

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, 1987

## TABLE 8-47

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN MEDICAL AND HEALTH SCIENCES BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | ASIAN | | AM. INDIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % W | TOTAL | % | WOMEN | % W | No. | % B | No. | % H | No. | % A | No. | % I | No. | % W |
| General Health Science | 2068 | 855 | 41.3 | 303 | 14.7 | 136 | 44.9 | 167 | 8.1 | 53 | 2.6 | 68 | 3.3 | 15 | 0.7 | 1765 | 85.3 |
| Medical Officer | 27723 | 5301 | 19.1 | 5117 | 18.5 | 1347 | 26.3 | 842 | 3.0 | 1369 | 4.9 | 2820 | 10.2 | 86 | 0.3 | 22606 | 81.5 |
| Nurse Anesthetist | 568 | 337 | 59.3 | 67 | 11.8 | 51 | 76.1 | 40 | 7.0 | 16 | 2.8 | 11 | 1.9 | 0 | 0.0 | 501 | 88.2 |
| Nurse | 42743 | 39119 | 91.5 | 10313 | 24.1 | 9680 | 93.9 | 5591 | 13.1 | 1514 | 3.5 | 2513 | 5.9 | 695 | 1.6 | 32430 | 75.9 |
| Dietitian & Nutritionist | 1640 | 1569 | 95.7 | 358 | 21.8 | 346 | 96.6 | 188 | 11.5 | 70 | 4.3 | 81 | 4.9 | 19 | 1.2 | 1282 | 78.2 |
| Occupational Therapist | 758 | 678 | 89.4 | 130 | 17.2 | 112 | 86.2 | 57 | 7.5 | 36 | 4.7 | 35 | 4.6 | 2 | 0.3 | 628 | 82.8 |
| Physical Therapist | 643 | 468 | 72.8 | 107 | 16.6 | 81 | 75.7 | 50 | 7.8 | 46 | 7.2 | 11 | 1.7 | 0 | 0.0 | 536 | 83.4 |
| Corrective Therapist | 538 | 149 | 27.7 | 161 | 29.9 | 49 | 30.4 | 136 | 25.3 | 13 | 2.4 | 9 | 1.7 | 3 | 0.6 | 377 | 70.1 |
| Manual Arts Therapist | 264 | 21 | 8.0 | 27 | 10.2 | 2 | 7.4 | 21 | 8.0 | 3 | 1.1 | 2 | 0.8 | 1 | 0.4 | 237 | 89.8 |
| Recreation/Creative Arts Ther | 760 | 361 | 47.5 | 136 | 17.9 | 53 | 39.0 | 108 | 14.2 | 21 | 2.8 | 6 | 0.8 | 1 | 0.1 | 624 | 82.1 |
| Educational Therapist | 85 | 49 | 57.6 | 12 | 14.1 | 7 | 58.3 | 12 | 14.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 73 | 85.9 |
| Medical Technologist | 5474 | 3797 | 69.4 | 1272 | 23.2 | 839 | 66.0 | 569 | 10.4 | 241 | 4.4 | 395 | 7.2 | 67 | 1.2 | 4202 | 76.8 |
| Pharmacist | 3657 | 1177 | 32.2 | 733 | 20.0 | 367 | 50.1 | 240 | 6.6 | 162 | 4.4 | 312 | 8.5 | 19 | 0.5 | 2924 | 80.0 |
| Optometrist | 191 | 40 | 20.9 | 15 | 7.9 | 8 | 53.3 | 5 | 2.6 | 3 | 1.6 | 7 | 3.7 | 0 | 0.0 | 176 | 92.1 |
| Speech Pathology & Audiology | 884 | 552 | 62.4 | 58 | 6.6 | 45 | 77.6 | 29 | 3.3 | 14 | 1.6 | 8 | 0.9 | 7 | 0.8 | 826 | 93.4 |
| Podiatrist | 194 | 17 | 8.8 | 18 | 9.3 | 6 | 33.3 | 10 | 5.2 | 1 | 0.5 | 5 | 2.6 | 2 | 1.0 | 176 | 90.7 |
| Dental Officer | 1422 | 187 | 13.2 | 132 | 9.3 | 23 | 17.4 | 54 | 3.8 | 41 | 2.9 | 37 | 2.6 | 0 | 0.0 | 1290 | 90.7 |
| Industrial Hygienist | 1071 | 258 | 24.1 | 145 | 13.5 | 41 | 28.3 | 70 | 6.5 | 32 | 3.0 | 41 | 3.8 | 2 | 0.2 | 926 | 86.5 |
| Consumer Safety | 1481 | 315 | 21.3 | 236 | 15.9 | 84 | 35.6 | 135 | 9.1 | 69 | 4.7 | 28 | 1.9 | 4 | 0.3 | 1245 | 84.1 |
| Veterinary Medical Science | 2095 | 181 | 8.6 | 415 | 19.8 | 46 | 11.1 | 121 | 5.8 | 64 | 3.1 | 218 | 10.4 | 12 | 0.6 | 1680 | 80.2 |
| TOTALS | 94259 | 55431 | 58.8 | 19755 | 21.0 | 13323 | 67.4 | 8445 | 9.0 | 3768 | 4.0 | 6607 | 7.0 | 935 | 1.0 | 74504 | 79.0 |

FIELD: Health Fields

SOURCE: Occupations of Federal White-Collar and Blue-Collar Workers October 31, 1985, U.S. Office of Personnel Management

## TABLE 8-48

FULL-TIME FEDERAL EMPLOYMENT IN HEALTH FIELDS BY SUPERVISORY STATUS AND SEX, OCTOBER 1985

| Occupation Code | Occupation Title | Total | Total Men | Total Women | Supervisory Total | Supervisory Men | Supervisory Women |
|---|---|---|---|---|---|---|---|
| 0601 P | GENERAL HEALTH SCIENCE | 1,716 | 1,024 | 692 | 378 | 279 | 95 |
| 0602 P | MEDICAL OFFICER | 9,600 | 7,864 | 1,736 | 2,225 | 2,005 | 220 |
| 0603 T | PHYSICIAN'S ASSISTANT | 1,111 | 802 | 309 | 34 | 31 | 3 |
| 0605 P | NURSE ANESTHETIST | 510 | 206 | 304 | 15 | 4 | 11 |
| 0610 P | NURSE | 39,109 | 3,419 | 35,690 | 4,761 | 360 | 4,401 |
| 0620 T | PRACTICAL NURSE | 12,974 | 1,248 | 11,726 | 4 | | ... 4 |
| 0621 T | NURSING ASSISTANT | 19,674 | 8,033 | 11,641 | 13 | 8 | 5 |
| 0622 T | MEDICAL SUPPLY AIDE&TECH | 2,080 | 1,200 | 880 | 161 | 103 | 58 |
| 0625 T | AUTOPSY ASSISTANT | 107 | 99 | 8 | 1 | 1 | |
| 0630 P | DIETITIAN & NUTRITIONIST | 1,536 | 75 | 1,461 | 434 | 25 | 409 |
| 0631 P | OCCUPATIONAL THERAPIST | 736 | 86 | 650 | 104 | 18 | 86 |
| 0633 P | PHYSICAL THERAPIST | 610 | 188 | 422 | 137 | 70 | 67 |
| 0635 P | CORRECTIVE THERAPIST | 542 | 410 | 132 | 73 | 69 | 4 |
| 0636 T | REHABILITATN THERAPY ASST | 843 | 499 | 344 | 1 | 1 | |
| 0637 P | MANUAL ARTS THERAPIST | 269 | 251 | 18 | 50 | 50 | |
| 0638 P | REC/CREATIVE ARTS THERAP | 727 | 400 | 327 | 143 | 108 | 35 |
| 0639 P | EDUCATIONAL THERAPIST | ...93 | 38 | 55 | 11 | 3 | 8 |
| 0642 T | NUCLEAR MEDICINE TECH | 322 | 156 | 166 | 28 | 19 | 9 |
| 0644 P | MEDICAL TECHNOLOGIST | 5,114 | 1,617 | 3,497 | 741 | 334 | 407 |
| 0645 T | MEDICAL TECHNICIAN | 2,373 | 984 | 1,389 | 68 | 36 | 32 |
| 0646 T | PATHOLOGY TECHNICIAN | 636 | 206 | 430 | 51 | 23 | 28 |
| 0647 T | DIAGNOSTIC RADIOL TECH | 2,811 | 1,529 | 1,282 | 284 | 211 | 73 |
| 0648 T | THERAPEUTIC RADIOL TECH | 110 | 32 | 78 | 8 | 4 | 4 |
| 0649 T | MEDICAL MACHINE TECH | 2,921 | 1,430 | 1,491 | 251 | 166 | 85 |
| 0650 T | MEDICAL TECHNICAL ASST | ... 9 | 8 | 1 | 2 | 2 | |
| 0660 P | PHARMACIST | 3,290 | 2,352 | 938 | 583 | 508 | 75 |
| 0661 T | PHARMACY TECHNICIAN | 2,395 | 923 | 1,472 | 25 | 17 | 8 |
| 0662 P | OPTOMETRIST | 133 | 112 | 21 | 5 | 5 | |
| 0664 T | RESTORATION TECHNICIAN | ...20 | 18 | 2 | 7 | 6 | 1 |
| 0665 P | SPEECH PATHOLOGY & AUDIOL | 661 | 312 | 349 | 133 | 101 | 32 |
| 0667 T | ORTHOTIST & PROSTHETIST | 249 | 233 | 16 | 43 | 43 | |
| 0668 P | PODIATRIST | 147 | 128 | 19 | 3 | 3 | |
| 0669 T | MEDICAL RECORD LIBRARIAN | 460 | 43 | 417 | 279 | 24 | 255 |
| 0670 A | HEALTH SYSTEM ADMIN | 530 | 465 | 65 | 464 | 418 | 46 |
| 0671 A | HEALTH SYSTEM SPECIALIST | 786 | 538 | 248 | 165 | 137 | 28 |
| 0672 T | PROSTHETIC REPRESENTATIVE | 111 | 105 | 6 | 83 | 81 | 2 |
| 0673 A | HOSPITAL HOUSEKEEPING MGT | 350 | 319 | 31 | 307 | 283 | 24 |
| 0675 T | MEDICAL RECORD TECHNICIAN | 2,387 | 307 | 2,080 | 147 | 24 | 123 |
| 0679 C | MEDICAL CLERK | 10,362 | 1,647 | 8,715 | 434 | 71 | 363 |
| 0680 P | DENTAL OFFICER | 968 | 913 | 51 | 267 | 266 | 1 |
| 0681 T | DENTAL ASSISTANT | 2,991 | 201 | 2,790 | 39 | 2 | 37 |
| 0682 T | DENTAL HYGIENE | 395 | 7 | 388 | | --- | --- |
| 0683 T | DENTAL LAB AID & TECH | 823 | 714 | 109 | 43 | 40 | 3 |
| 0685 A | PUB HEALTH PROGRAM SPEC | 1,184 | 870 | 314 | 399 | 345 | 54 |
| 0688 A | SANITARIAN | ...50 | 43 | 7 | 7 | 7 | |
| 0690 P | INDUSTRIAL HYGIENE | 1,012 | 793 | 219 | 114 | 108 | 6 |
| 0696 P | CONSUMER SAFETY | 1,517 | 1,208 | 309 | 312 | 282 | 30 |
| 0698 T | ENVIRONMENTAL HEALTH TECH | 150 | 118 | 32 | 4 | 4 | |
| 0699 T | HEALTH AID AND TECHNICIAN | 4,198 | 1,985 | 2,213 | 180 | 122 | 58 |
| 0600 | MED HOSP DENT &PUB HEALTH | 141,698 | 46,158 | 95,540 | 14,017 | 6,827 | 7,190 |
| 0701 P | VETERINARY MEDICAL SCI | 2,082 | 1,923 | 159 | 1,199 | 1,146 | 53 |
| 0704 T | ANIMAL HEALTH TECHNICIAN | 639 | 593 | 46 | 42 | 41 | 1 |
| 0799 O | VETERINARY STUDNT TRAINEE | ... 7 | 3 | 4 | | --- | --- |
| 0700 | VETERINARY MEDICAL SCI | 2,728 | 2,519 | 209 | 1,241 | 1,187 | 54 |

P=Professional T=Technical A=Analytical C=Clerical

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SOURCE: Science and Engineering Doctorates: 1960-85, National Science Foundation, 1987; and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 9-1

PHD AWARDS IN SOCIAL AND BEHAVIORAL SCIENCES BY SUBFIELD AND SEX, 1960-86

| Subfields | Year of Doctorate | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960-69 | | | 1970-79 | | | 1980-85 | | | 1985 | | | 1986 | | |
| | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom | Total | Women | %Wom |
| TOTAL BEHAV & SOCIAL SCI | 24897 | 3694 | 14.8 | 57295 | 14164 | 24.7 | 36388 | 13536 | 38.3 | 5682 | 2341 | 41.2 | 5841 | 2479 | 42.4 |
| PSYCHOLOGY | 10969 | 2269 | 20.7 | 26139 | 8394 | 32.1 | 19230 | 8933 | 46.5 | 3075 | 1519 | 49.4 | 3071 | 1564 | 50.9 |
| Clinical | 3674 | 841 | 22.9 | 8126 | 2652 | 32.6 | 7076 | 3299 | 46.6 | 1160 | 580 | 50.0 | 1144 | 580 | 50.7 |
| Cognitive(1) | | | | | | | 218 | 91 | 41.7 | 76 | 23 | 30.3 | 70 | 33 | 47.1 |
| Comparative(2) | 115 | 17 | 14.8 | 218 | 58 | 26.6 | 66 | 26 | 39.4 | 11 | 2 | 18.2 | 14 | 6 | 42.9 |
| Counseling(3) | 679 | 131 | 19.3 | 2171 | 710 | 32.7 | 2322 | 1097 | 47.2 | 429 | 212 | 49.4 | 448 | 236 | 52.7 |
| Developmental(4) | 359 | 165 | 46.0 | 1647 | 880 | 53.4 | 1203 | 784 | 65.2 | 176 | 113 | 64.2 | 182 | 116 | 63.7 |
| Experimental(2) | 1916 | 287 | 15.0 | 3439 | 834 | 24.3 | 1373 | 504 | 36.7 | 165 | 65 | 39.4 | 147 | 64 | 43.5 |
| Exper, Compar, Physiol(2) | 457 | 59 | 12.9 | | | | | | | | | | | | |
| Educational | 550 | 156 | 28.4 | 1250 | 442 | 35.4 | 948 | 476 | 50.2 | 127 | 78 | 61.4 | 107 | 58 | 54.2 |
| Indust, Organizational(5) | 436 | 18 | 4.1 | 732 | 93 | 12.7 | 531 | 159 | 29.9 | 99 | 28 | 28.3 | 109 | 51 | 46.8 |
| Personality | 285 | 60 | 21.1 | 528 | 190 | 36.0 | 206 | 91 | 44.2 | 21 | 9 | 42.9 | 16 | 9 | 56.3 |
| Physiological(2) | 517 | 75 | 14.5 | 1224 | 311 | 25.4 | 546 | 163 | 29.9 | 79 | 35 | 44.3 | 73 | 30 | 41.1 |
| Psychometrics | 188 | 26 | 13.8 | 230 | 39 | 17.0 | 82 | 35 | 42.7 | 10 | 3 | 30.0 | 11 | 7 | 63.6 |
| Quantitative(1) | | | | | | | 47 | 13 | 27.7 | 16 | 4 | 25.0 | 23 | 8 | 34.8 |
| School | 185 | 47 | 25.4 | 1046 | 437 | 41.8 | 777 | 418 | 53.8 | 92 | 54 | 58.7 | 116 | 59 | 50.9 |
| Social | 1029 | 231 | 22.4 | 1992 | 598 | 30.0 | 1063 | 517 | 48.6 | 166 | 93 | 56.0 | 141 | 79 | 56.0 |
| Psychology, General | 395 | 118 | 29.9 | 2017 | 662 | 32.8 | 1541 | 717 | 46.5 | 258 | 122 | 47.3 | 294 | 145 | 49.3 |
| Psychology, Other | 184 | 38 | 20.7 | 1519 | 488 | 32.1 | 1231 | 543 | 44.1 | 190 | 98 | 51.6 | 176 | 83 | 47.2 |
| SOCIAL SCIENCES | 15012 | 1547 | 10.2 | 33287 | 6390 | 19.2 | 17205 | 5115 | 29.7 | 2769 | 901 | 32.5 | 2770 | 915 | 33.0 |
| Anthropology | 1015 | 218 | 21.5 | 3402 | 1180 | 34.7 | 2133 | 991 | 46.5 | 353 | 181 | 51.3 | 381 | 197 | 51.7 |
| Archeology | 100 | 34 | 34.0 | 220 | 95 | 43.2 | 160 | 88 | 55.0 | 24 | 9 | 37.5 | | | |
| Area Studies | 101 | 16 | 15.8 | 377 | 72 | 19.1 | 123 | 35 | 28.5 | 19 | 5 | 26.3 | 28 | 6 | 21.4 |
| Criminology(9) | | | | | | | 209 | 59 | 28.2 | 38 | 10 | 26.3 | 24 | 7 | 29.2 |
| Demography(1) | | | | | | | 69 | 29 | 42.0 | 24 | 9 | 37.5 | 15 | 6 | 40.0 |
| Economics | 5286 | 245 | 4.6 | 8318 | 735 | 8.8 | 4634 | 671 | 14.5 | 785 | 122 | 15.5 | 836 | 164 | 19.6 |
| Econometrics | 207 | 9 | 4.3 | 268 | 12 | 4.5 | 138 | 15 | 10.9 | 27 | 2 | 7.4 | 25 | 2 | 8.0 |
| Geography | 695 | 38 | 5.5 | 1666 | 168 | 10.1 | 701 | 143 | 20.4 | 120 | 29 | 24.2 | 120 | 39 | 32.5 |
| International Relations | 712 | 74 | 10.4 | 1121 | 135 | 12.0 | 493 | 75 | 15.2 | 87 | 16 | 18.4 | 76 | 15 | 19.7 |
| Pol Sci & Government(7) | | | | | | | 1223 | 288 | 23.5 | 407 | 108 | 26.5 | 414 | 117 | 28.3 |
| Political science(7) | | | | 2369 | 422 | 17.8 | 1409 | 304 | 21.6 | | | | | | |
| Pol sci, public admin(7) | 3123 | 259 | 8.3 | 4351 | 560 | 12.9 | | | | | | | | | |
| Public Policy Studies(1) | | | | | | | 192 | 70 | 36.5 | 70 | 24 | 34.3 | 80 | 34 | 42.5 |
| Sociology | 2538 | 445 | 17.5 | 6356 | 1812 | 28.5 | 3275 | 1363 | 41.6 | 461 | 234 | 50.8 | 492 | 216 | 43.9 |
| Statistics | 134 | 9 | 6.7 | 623 | 59 | 9.5 | 262 | 51 | 19.5 | 60 | 14 | 23.3 | 65 | 17 | 26.2 |
| Urban Studies(8) | | | | 623 | 93 | 14.9 | 497 | 126 | 25.4 | 76 | 21 | 27.6 | 50 | 16 | 32.0 |
| History of science(6) | | | | 282 | 67 | 23.8 | 136 | 45 | 33.1 | 23 | 2 | 8.7 | | | |
| Linguistics | 738 | 168 | 22.8 | 1715 | 615 | 35.9 | 1049 | 502 | 47.9 | 176 | 91 | 51.7 | | | |
| Social Sciences, General | 65 | 7 | 10.8 | 300 | 84 | 28.0 | 140 | 48 | 34.3 | 18 | 8 | 44.4 | 36 | 13 | 36.1 |
| Social Sciences, Other | 298 | 25 | 8.4 | 1296 | 281 | 21.7 | 763 | 341 | 44.7 | 109 | 50 | 45.9 | 128 | 66 | 51.6 |

(1) Introduced in 1983. (2) "Experimental, comparative, and physiological psychology" split into separate subfields in 1962. (3) Changed from "Counseling and guidance" to "Couseling" in 1983. (4) Changed from "Developmental and gerontological" to "Developmental" in 1983. (5) Changed from "Industrial and personnel" to "Industrial and organizational" in 1983. (6) "History and philosophy of science" before 1983; introduced in 1971. (7) "Political science, public administration: split into separate subfields in 1976 with "Public administration" then not included in science or engineering fields. In 1983, "Political science and government" replaced "Political science." (8) Introduced in 1970 as "Urban and regional planning." (9) Introduced in 1980.

SOURCE: Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 9-2

PHD AWARDS IN SELECTED SOCIAL SCIENCES BY CITIZENSHIP AND RACE/ETHNICITY, 1973-86

| Field & Year | Total* | Non-Cit Temp Visas | Citizens and Permanent Visa Non-Citizens | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Amer. Ind. | Asian | Black | White | His-panic | Other/ Unkn. |
| ANTHROPOLOGY | | | | | | | | | |
| 1973-76 | 1,518 | 137 | 1,381 | 9 | 17 | 26 | 1,149 | 15 | 165 |
| 1977-80 | 1,537 | 101 | 1,397 | 13 | 27 | 24 | 1,204 | 23 | 106 |
| 1981 | 369 | 25 | 329 | 1 | 4 | 7 | 283 | 9 | 25 |
| 1982 | 333 | 30 | 295 | | 4 | 7 | 268 | 6 | 10 |
| 1983 | 373 | 24 | 335 | 2 | 2 | 7 | 306 | 8 | 10 |
| 1984 | 335 | 28 | 289 | 2 | 5 | 10 | 257 | 5 | 10 |
| 1985 | 353 | 23 | 316 | 3 | 12 | 10 | 260 | 15 | 16 |
| 1986 | 381 | 29 | 329 | 2 | 5 | 4 | 295 | 14 | 9 |
| 1973-86 | 5,199 | 397 | 4,671 | 32 | 76 | 95 | 4,022 | 95 | 351 |
| SOCIOLOGY | | | | | | | | | |
| 1973-76 | 2,658 | 255 | 2,403 | 8 | 46 | 97 | 1,924 | 22 | 306 |
| 1977-80 | 2,569 | 245 | 2,278 | 20 | 66 | 116 | 1,910 | 57 | 109 |
| 1981 | 603 | 69 | 520 | | 18 | 25 | 444 | 15 | 18 |
| 1982 | 568 | 54 | 494 | 1 | 19 | 29 | 414 | 18 | 12 |
| 1983 | 525 | 64 | 436 | | 10 | 26 | 377 | 11 | 12 |
| 1984 | 515 | 62 | 434 | 1 | 11 | 28 | 373 | 17 | 4 |
| 1985 | 461 | 60 | 380 | | 8 | 26 | 323 | 17 | 6 |
| 1986 | 492 | 68 | 396 | 4 | 11 | 25 | 330 | 14 | 12 |
| 1973-86 | 8,391 | 877 | 7,341 | 35 | 189 | 372 | 6,095 | 171 | 479 |
| ECONOMICS | | | | | | | | | |
| 1973-76 | 3,461 | 816 | 2,645 | 8 | 90 | 30 | 2,214 | 16 | 287 |
| 1977-80 | 3,112 | 761 | 2,263 | 7 | 119 | 47 | 1,911 | 33 | 146 |
| 1981 | 807 | 199 | 575 | 2 | 33 | 16 | 477 | 12 | 36 |
| 1982 | 735 | 195 | 491 | | 36 | 18 | 409 | 12 | 16 |
| 1983 | 792 | 205 | 549 | | 36 | 15 | 475 | 8 | 15 |
| 1984 | 768 | 239 | 496 | 1 | 32 | 20 | 420 | 12 | 11 |
| 1985 | 785 | 269 | 481 | 2 | 26 | 14 | 405 | 14 | 20 |
| 1986 | 836 | 260 | 519 | 2 | 28 | 15 | 450 | 6 | 18 |
| 1973-86 | 11,296 | 2,944 | 8,019 | 22 | 399 | 175 | 6,761 | 113 | 549 |
| POLITICAL SCIENCE | | | | | | | | | |
| 1973-76 | 628 | 88 | 540 | 3 | 9 | 14 | 477 | 8 | 29 |
| 1977-80 | 2,243 | 227 | 1,943 | 6 | 48 | 100 | 1,639 | 37 | 113 |
| 1981 | 445 | 72 | 373 | | 15 | 25 | 305 | 8 | 20 |
| 1982 | 459 | 60 | 372 | 1 | 10 | 24 | 311 | 10 | 16 |
| 1983 | 397 | 55 | 322 | 1 | 8 | 18 | 266 | 11 | 18 |
| 1984 | 419 | 65 | 328 | | 13 | 20 | 266 | 10 | 19 |
| 1985 | 407 | 79 | 292 | 1 | 10 | 22 | 236 | 6 | 17 |
| 1986 | 414 | 72 | 295 | | 11 | 17 | 246 | 11 | 10 |
| 1973-86 | 5,412 | 718 | 4,465 | 12 | 124 | 240 | 3,746 | 101 | 242 |

* Includes individuals who did not report their citizenship at time of doctorate.

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 9-3

PhD DEGREES IN THE BEHAVIORAL AND SOCIAL SCIENCES BY SEX AND SUBFIELD (1950 - 1986)

| | | | | Behavioral and Social Sciences Fields | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Psychology | | | | Economics | | | | Political Science | | | | Sociology | | | | Other | | | |
| Year | Total | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W | No. | %T | Wom | %W |
| 1950 | 782 | 90 | 12 | 283 | 36 | 42 | 15 | 200 | 26 | 9 | 5 | 127 | 16 | 10 | 8 | 98 | 13 | 18 | 18 | 74 | 9 | 11 | 15 |
| 1951 | 1041 | 115 | 11 | 425 | 41 | 57 | 13 | 236 | 23 | 17 | 7 | 152 | 15 | 9 | 6 | 129 | 12 | 18 | 14 | 99 | 10 | 14 | 14 |
| 1952 | 1141 | 129 | 11 | 540 | 47 | 73 | 14 | 239 | 21 | 16 | 7 | 147 | 13 | 12 | 8 | 141 | 12 | 20 | 14 | 74 | 6 | 8 | 11 |
| 1953 | 1198 | 122 | 10 | 583 | 49 | 79 | 14 | 222 | 19 | 8 | 4 | 164 | 14 | 12 | 7 | 157 | 13 | 12 | 8 | 72 | 6 | 11 | 15 |
| 1954 | 1298 | 124 | 10 | 619 | 48 | 66 | 11 | 245 | 19 | 12 | 5 | 153 | 12 | 10 | 7 | 184 | 14 | 28 | 15 | 97 | 7 | 8 | 8 |
| 1955 | 1309 | 132 | 10 | 688 | 50 | 84 | 12 | 241 | 18 | 9 | 4 | 181 | 13 | 10 | 6 | 167 | 12 | 20 | 12 | 92 | 7 | 9 | 10 |
| 1956 | 1411 | 148 | 10 | 634 | 45 | 86 | 14 | 232 | 16 | 11 | 5 | 203 | 14 | 15 | 7 | 170 | 12 | 29 | 17 | 172 | 12 | 7 | 4 |
| 1957 | 1265 | 138 | 11 | 550 | 43 | 90 | 16 | 236 | 19 | 9 | 4 | 156 | 12 | 7 | 4 | 134 | 11 | 16 | 12 | 189 | 15 | 16 | 8 |
| 1958 | 1339 | 149 | 11 | 572 | 43 | 84 | 15 | 239 | 18 | 5 | 2 | 170 | 13 | 6 | 4 | 150 | 11 | 28 | 19 | 208 | 16 | 26 | 13 |
| 1959 | 1400 | 171 | 12 | 635 | 45 | 98 | 15 | 221 | 16 | 10 | 5 | 191 | 14 | 15 | 8 | 157 | 11 | 16 | 10 | 196 | 14 | 32 | 16 |
| 50-59 | 12,244 | 1,318 | 11 | 5,529 | 45 | 759 | 14 | 2,311 | 19 | 106 | 5 | 1,644 | 13 | 106 | 6 | 1,487 | 12 | 205 | 14 | 1,273 | 10 | 142 | 11 |
| 1960 | 1482 | 173 | 12 | 641 | 43 | 97 | 15 | 237 | 16 | 14 | 6 | 201 | 14 | 17 | 8 | 161 | 11 | 26 | 16 | 242 | 16 | 19 | 8 |
| 1961 | 1607 | 212 | 13 | 703 | 44 | 136 | 19 | 266 | 17 | 13 | 5 | 217 | 14 | 13 | 6 | 184 | 11 | 32 | 17 | 237 | 15 | 18 | 8 |
| 1962 | 1720 | 225 | 13 | 781 | 45 | 149 | 19 | 268 | 16 | 15 | 6 | 214 | 12 | 12 | 6 | 173 | 10 | 26 | 15 | 284 | 17 | 23 | 8 |
| 1963 | 1899 | 247 | 13 | 844 | 44 | 144 | 17 | 331 | 17 | 20 | 6 | 228 | 12 | 13 | 6 | 208 | 11 | 31 | 15 | 288 | 15 | 39 | 14 |
| 1964 | 2100 | 280 | 13 | 939 | 45 | 182 | 19 | 385 | 18 | 17 | 4 | 263 | 13 | 21 | 8 | 198 | 9 | 29 | 15 | 315 | 15 | 31 | 10 |
| 1965 | 2137 | 266 | 12 | 847 | 40 | 159 | 19 | 410 | 19 | 17 | 4 | 304 | 14 | 26 | 9 | 230 | 11 | 36 | 16 | 346 | 16 | 28 | 8 |
| 1966 | 2452 | 364 | 15 | 1046 | 43 | 220 | 21 | 458 | 19 | 22 | 5 | 336 | 14 | 29 | 9 | 244 | 10 | 36 | 15 | 368 | 15 | 57 | 15 |
| 1967 | 2913 | 426 | 15 | 1231 | 42 | 332 | 19 | 546 | 19 | 37 | 7 | 390 | 13 | 38 | 10 | 327 | 11 | 59 | 18 | 419 | 14 | 60 | 14 |
| 1968 | 3175 | 500 | 16 | 1268 | 40 | 286 | 23 | 600 | 19 | 35 | 6 | 457 | 14 | 52 | 11 | 367 | 12 | 68 | 19 | 483 | 15 | 59 | 12 |
| 1969 | 3668 | 603 | 16 | 1551 | 42 | 356 | 23 | 634 | 17 | 43 | 7 | 467 | 13 | 49 | 10 | 430 | 12 | 86 | 20 | 581 | 16 | 69 | 12 |
| 60-69 | 23,148 | 3,296 | 14 | 9,851 | 43 | 1,961 | 20 | 4,135 | 18 | 233 | 6 | 3,077 | 13 | 270 | 9 | 2,522 | 11 | 429 | 17 | 3,563 | 15 | 403 | 11 |
| 1970 | 4171 | 670 | 16 | 1668 | 40 | 372 | 22 | 794 | 19 | 52 | 7 | 525 | 13 | 56 | 11 | 504 | 13 | 104 | 19 | 650 | 16 | 86 | 13 |
| 1971 | 4560 | 811 | 18 | 1782 | 39 | 427 | 24 | 721 | 16 | 53 | 7 | 700 | 15 | 85 | 12 | 574 | 13 | 119 | 21 | 783 | 17 | 127 | 16 |
| 1972 | 4832 | 864 | 18 | 1881 | 39 | 467 | 25 | 794 | 16 | 60 | 8 | 755 | 16 | 80 | 11 | 636 | 13 | 136 | 21 | 763 | 16 | 121 | 16 |
| 1973 | 5234 | 1099 | 21 | 2089 | 40 | 605 | 29 | 845 | 16 | 52 | 6 | 747 | 14 | 95 | 13 | 583 | 11 | 154 | 26 | 970 | 19 | 193 | 20 |
| 1974 | 5449 | 1263 | 23 | 2339 | 43 | 691 | 30 | 788 | 14 | 75 | 10 | 766 | 14 | 111 | 14 | 632 | 12 | 177 | 28 | 924 | 17 | 209 | 23 |
| 1975 | 5565 | 1362 | 24 | 2442 | 44 | 754 | 31 | 815 | 15 | 73 | 9 | 680 | 12 | 111 | 16 | 693 | 12 | 209 | 30 | 935 | 17 | 215 | 23 |
| 1976 | 5717 | 1509 | 26 | 2581 | 45 | 819 | 32 | 763 | 13 | 81 | 11 | 723 | 13 | 121 | 17 | 729 | 13 | 218 | 30 | 921 | 16 | 270 | 29 |
| 1977 | 5756 | 1645 | 29 | 2761 | 48 | 991 | 36 | 758 | 13 | 86 | 11 | 641 | 11 | 100 | 16 | 714 | 12 | 234 | 33 | 882 | 15 | 234 | 27 |
| 1978 | 5437 | 1659 | 31 | 2597 | 48 | 971 | 37 | 706 | 13 | 80 | 11 | 636 | 12 | 119 | 19 | 599 | 11 | 223 | 37 | 899 | 17 | 266 | 30 |
| 1979 | 5373 | 1751 | 33 | 2674 | 50 | 1071 | 40 | 712 | 13 | 93 | 13 | 563 | 10 | 99 | 18 | 612 | 11 | 221 | 36 | 812 | 15 | 267 | 33 |
| 70-79 | 52,094 | 12,633 | 24 | 22,814 | 44 | 7,168 | 31 | 7,696 | 15 | 705 | 9 | 6,739 | 13 | 977 | 14 | 6,306 | 12 | 1,795 | 28 | 8,539 | 16 | 1,988 | 23 |
| 1980 | 5410 | 1884 | 35 | 2775 | 51 | 1171 | 42 | 677 | 13 | 102 | 15 | 535 | 10 | 107 | 20 | 583 | 11 | 228 | 39 | 840 | 16 | 276 | 33 |
| 1981 | 5594 | 1967 | 35 | 2955 | 53 | 1274 | 43 | 727 | 13 | 100 | 14 | 484 | 9 | 96 | 20 | 610 | 11 | 239 | 39 | 818 | 15 | 258 | 32 |
| 1982 | 5330 | 1953 | 37 | 2780 | 52 | 1262 | 45 | 699 | 13 | 96 | 14 | 513 | 10 | 112 | 22 | 558 | 10 | 207 | 37 | 780 | 15 | 276 | 35 |
| 1983 | 5615 | 2257 | 40 | 3108 | 55 | 1487 | 48 | 734 | 13 | 123 | 17 | 435 | 8 | 101 | 23 | 522 | 9 | 221 | 42 | 816 | 15 | 305 | 37 |
| 1984 | 5446 | 2215 | 41 | 2973 | 55 | 1456 | 49 | 729 | 13 | 109 | 15 | 457 | 8 | 105 | 23 | 520 | 10 | 231 | 44 | 767 | 14 | 314 | 41 |
| 1985 | 5378 | 2208 | 41 | 2908 | 54 | 1416 | 49 | 749 | 14 | 122 | 16 | 441 | 8 | 115 | 26 | 480 | 9 | 248 | 52 | 800 | 15 | 307 | 38 |
| 1986 | 5684 | 2440 | 43 | 3088 | 54 | 1591 | 52 | 789 | 14 | 157 | 20 | 439 | 8 | 115 | 26 | 504 | 9 | 227 | 45 | 864 | 15 | 350 | 41 |
| 80-86 | 38,457 | 14,904 | 39 | 20,587 | 54 | 9,657 | 47 | 5,104 | 13 | 809 | 16 | 3,304 | 9 | 751 | 23 | 3,777 | 10 | 1,601 | 42 | 5,685 | 15 | 2,086 | 37 |
| TOTAL | 125,943 | 32,151 | 26 | 58,781 | 47 | 19,545 | 33 | 19,246 | 15 | 1,853 | 10 | 14,764 | 12 | 2,104 | 14 | 14,092 | 11 | 4,030 | 29 | 19,060 | 15 | 4,619 | 24 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 9-3 (continued)

MASTERS DEGREES IN THE SOCIAL SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | Social Sciences Fields | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Economics | | | | Political Sci | | | | Sociology | | | | Other | | | |
| Year | Total Soc Sci | Women | %W | No. | %T | Women | %W | No. | %T | Women | %W | No. | %T | Women | %W | No. | %T | Women | %W |
| 1950 | 2468 | 484 | 20 | 921 | 37 | 114 | 12 | 710 | 29 | 113 | 16 | 552 | 22 | 179 | 32 | 285 | 12 | 78 | 27 |
| 1951 | 2343 | 375 | 16 | 809 | 35 | 71 | 9 | 657 | 28 | 90 | 14 | 584 | 25 | 162 | 28 | 293 | 13 | 52 | 18 |
| 1952 | 2007 | 339 | 17 | 695 | 35 | 83 | 12 | 525 | 26 | 76 | 14 | 517 | 26 | 131 | 25 | 270 | 13 | 49 | 18 |
| 1953 | 1865 | 326 | 17 | 582 | 31 | 61 | 10 | 509 | 27 | 76 | 15 | 504 | 27 | 139 | 28 | 270 | 14 | 50 | 19 |
| 1954 | 1854 | 306 | 17 | 609 | 33 | 62 | 10 | 534 | 29 | 79 | 15 | 440 | 24 | 117 | 27 | 271 | 15 | 48 | 18 |
| 1955 | 1817 | 345 | 19 | 617 | 34 | 78 | 13 | 498 | 27 | 84 | 17 | 474 | 26 | 126 | 27 | 228 | 13 | 57 | 25 |
| 1956 | 1944 | 331 | 17 | 581 | 30 | 56 | 10 | 509 | 26 | 75 | 15 | 402 | 21 | 127 | 32 | 452 | 23 | 73 | 16 |
| 1957 | 2189 | 413 | 19 | 606 | 28 | 50 | 8 | 535 | 24 | 68 | 13 | 515 | 24 | 223 | 43 | 533 | 24 | 72 | 14 |
| 1958 | 2370 | 391 | 16 | 669 | 28 | 70 | 10 | 665 | 28 | 80 | 12 | 397 | 17 | 139 | 35 | 639 | 27 | 102 | 16 |
| 1959 | 2460 | 413 | 17 | 664 | 27 | 60 | 9 | 649 | 26 | 110 | 17 | 461 | 19 | 140 | 30 | 686 | 28 | 103 | 15 |
| 50-59 | 21,317 | 3,723 | 17 | 6,753 | 32 | 705 | 10 | 5,791 | 27 | 851 | 15 | 4,846 | 23 | 1,483 | 31 | 3,927 | 18 | 684 | 17 |
| 1960 | 2544 | 386 | 15 | 708 | 28 | 58 | 8 | 722 | 28 | 129 | 18 | 440 | 17 | 113 | 26 | 674 | 26 | 86 | 13 |
| 1961 | 2767 | 412 | 15 | 820 | 30 | 67 | 8 | 764 | 28 | 112 | 15 | 504 | 18 | 142 | 28 | 679 | 25 | 91 | 13 |
| 1962 | 3124 | 538 | 17 | 853 | 27 | 89 | 10 | 839 | 27 | 176 | 21 | 578 | 19 | 156 | 27 | 854 | 27 | 117 | 14 |
| 1963 | 3641 | 609 | 17 | 1029 | 28 | 82 | 8 | 1051 | 29 | 184 | 18 | 684 | 19 | 197 | 29 | 877 | 24 | 146 | 17 |
| 1964 | 3858 | 662 | 17 | 1111 | 29 | 98 | 9 | 1163 | 30 | 223 | 19 | 646 | 17 | 180 | 28 | 938 | 24 | 161 | 17 |
| 1965 | 4348 | 819 | 19 | 1268 | 29 | 150 | 12 | 1210 | 28 | 230 | 19 | 789 | 18 | 246 | 31 | 1081 | 25 | 193 | 18 |
| 1966 | 5207 | 1030 | 20 | 1528 | 29 | 169 | 11 | 1429 | 27 | 277 | 19 | 981 | 19 | 301 | 31 | 1269 | 24 | 283 | 22 |
| 1967 | 6167 | 1197 | 19 | 1778 | 29 | 168 | 9 | 1775 | 29 | 387 | 22 | 1193 | 19 | 356 | 30 | 1421 | 23 | 286 | 20 |
| 1968 | 6851 | 1394 | 20 | 1921 | 28 | 197 | 10 | 1937 | 28 | 378 | 20 | 1193 | 17 | 403 | 34 | 1800 | 26 | 416 | 23 |
| 1969 | 7714 | 1624 | 21 | 2113 | 27 | 242 | 11 | 2108 | 27 | 405 | 19 | 1656 | 21 | 531 | 32 | 1837 | 24 | 446 | 24 |
| 60-69 | 46,221 | 8,671 | 19 | 13,129 | 28 | 1,320 | 10 | 12,998 | 28 | 2,501 | 19 | 8,664 | 19 | 2,625 | 30 | 11,430 | 25 | 2,225 | 19 |
| 1970 | 7956 | 1967 | 25 | 1990 | 25 | 247 | 12 | 2105 | 26 | 442 | 21 | 1816 | 23 | 677 | 37 | 2045 | 26 | 601 | 29 |
| 1971 | 8344 | 2089 | 25 | 1997 | 24 | 262 | 13 | 2318 | 28 | 479 | 21 | 1809 | 22 | 677 | 37 | 2220 | 27 | 671 | 30 |
| 1972 | 9065 | 2251 | 25 | 2225 | 25 | 284 | 13 | 2451 | 27 | 502 | 20 | 1945 | 21 | 754 | 39 | 2444 | 27 | 711 | 29 |
| 1973 | 9094 | 2291 | 25 | 2231 | 25 | 283 | 13 | 2399 | 26 | 480 | 20 | 1923 | 21 | 777 | 40 | 2541 | 28 | 751 | 30 |
| 1974 | 9358 | 2463 | 26 | 2145 | 23 | 303 | 14 | 2448 | 26 | 456 | 19 | 2196 | 23 | 869 | 40 | 2569 | 27 | 835 | 33 |
| 1975 | 9229 | 2559 | 28 | 2133 | 23 | 325 | 15 | 2333 | 25 | 476 | 20 | 2112 | 23 | 808 | 38 | 2651 | 29 | 930 | 35 |
| 1976 | 8944 | 2678 | 30 | 2093 | 23 | 334 | 16 | 2192 | 25 | 473 | 22 | 2010 | 22 | 844 | 42 | 2649 | 30 | 1027 | 39 |
| 1977 | 8974 | 2753 | 31 | 2166 | 24 | 383 | 18 | 2223 | 25 | 504 | 23 | 1830 | 20 | 812 | 44 | 2755 | 31 | 1054 | 38 |
| 1978 | 8320 | 2667 | 32 | 1997 | 24 | 396 | 20 | 2070 | 25 | 547 | 26 | 1611 | 19 | 733 | 45 | 2642 | 32 | 991 | 38 |
| 1979 | 7948 | 2623 | 33 | 1960 | 25 | 392 | 20 | 2038 | 26 | 558 | 27 | 1415 | 18 | 670 | 47 | 2535 | 32 | 1003 | 40 |
| 70-79 | 87,232 | 24,321 | 28 | 20,937 | 24 | 3,209 | 15 | 22,577 | 26 | 4,917 | 22 | 18,667 | 21 | 7,621 | 41 | 25,051 | 29 | 8,574 | 34 |
| 1980 | 7658 | 2628 | 34 | 1823 | 24 | 382 | 21 | 1938 | 25 | 515 | 27 | 1341 | 18 | 674 | 50 | 2556 | 33 | 1057 | 41 |
| 1981 | 7575 | 2721 | 36 | 1911 | 25 | 444 | 23 | 1875 | 25 | 533 | 28 | 1240 | 16 | 650 | 52 | 2549 | 34 | 1094 | 43 |
| 1982 | 7540 | 2729 | 36 | 1964 | 26 | 483 | 25 | 1954 | 26 | 610 | 31 | 1145 | 15 | 626 | 55 | 2477 | 33 | 1010 | 41 |
| 1983 | 7533 | 2785 | 37 | 1972 | 26 | 469 | 24 | 1829 | 24 | 543 | 30 | 1112 | 15 | 627 | 56 | 2620 | 35 | 1146 | 44 |
| 1984 | 7300 | 2740 | 38 | 1891 | 26 | 445 | 24 | 1769 | 24 | 537 | 30 | 1008 | 14 | 552 | 55 | 2632 | 36 | 1206 | 46 |
| 1985 | 7034 | 2660 | 38 | 1992 | 28 | 484 | 24 | 1500 | 21 | 438 | 29 | 1022 | 15 | 566 | 55 | 2520 | 36 | 1172 | 47 |
| 1986 | 7115 | 2768 | 39 | 1937 | 27 | 503 | 26 | 1704 | 24 | 550 | 32 | 965 | 14 | 536 | 56 | 2509 | 35 | 1179 | 47 |
| 80-86 | 51,755 | 19,031 | 37 | 13,490 | 26 | 3,210 | 24 | 12,569 | 24 | 3,726 | 30 | 7,833 | 15 | 4,231 | 54 | 17,863 | 35 | 7,864 | 44 |
| TOTAL | 206,525 | 55,746 | 27 | 47,917 | 23 | 9,629 | 20 | 47,715 | 23 | 12,369 | 26 | 34,333 | 17 | 16,083 | 47 | 60,777 | 29 | 24,302 | 40 |

SOURCE: Series of Earned Degrees Conferred, U.S. Office of Education Center for Statistics, Adapted to National Science Foundation Field Definitions

## TABLE 9-3 (continued)

BACHELORS DEGREES IN THE SOCIAL SCIENCES BY SUBFIELD AND SEX (1950 - 1986)

| | | | | Social Sciences Fields | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Psychology | | | Economics | | | Political Sci | | | Sociology | | | Other | | |
| Year | Total Soc Sci | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W | No. | Women | %W |
| 1950 | 39469 | 9929 | 25 | 9582 | 3526 | 37 | 14573 | 1102 | 8 | 6346 | 980 | 15 | 3887 | 4039 | 51 | 1081 | 284 | 26 |
| 1951 | 32164 | 8933 | 28 | 7819 | 2983 | 38 | 10484 | 905 | 9 | 5582 | 884 | 16 | 7320 | 3925 | 54 | 959 | 236 | 25 |
| 1952 | 27765 | 8780 | 32 | 6622 | 2839 | 43 | 8595 | 1075 | 13 | 4925 | 909 | 18 | 6697 | 3711 | 55 | 926 | 246 | 27 |
| 1953 | 25308 | 8005 | 32 | 5946 | 2616 | 44 | 7313 | 768 | 11 | 5086 | 974 | 19 | 6102 | 3447 | 56 | 861 | 200 | 23 |
| 1954 | 24493 | 8059 | 33 | 5758 | 2673 | 46 | 6728 | 790 | 12 | 5332 | 1018 | 19 | 5702 | 3315 | 58 | 973 | 263 | 27 |
| 1955 | 23835 | 7774 | 33 | 5532 | 2523 | 46 | 6364 | 686 | 11 | 5500 | 1085 | 20 | 5533 | 3200 | 58 | 906 | 280 | 31 |
| 1956 | 25186 | 7992 | 32 | 5665 | 2557 | 45 | 6584 | 676 | 10 | 5670 | 1109 | 20 | 5916 | 3363 | 57 | 1351 | 287 | 21 |
| 1957 | 26915 | 8301 | 31 | 6191 | 2666 | 43 | 6878 | 664 | 10 | 5876 | 1109 | 19 | 6383 | 3531 | 55 | 1589 | 331 | 21 |
| 1958 | 29050 | 8502 | 29 | 6930 | 2867 | 41 | 7514 | 605 | 8 | 6167 | 1136 | 18 | 6583 | 3606 | 55 | 1856 | 288 | 16 |
| 1959 | 30328 | 8798 | 29 | 7383 | 2906 | 39 | 7723 | 644 | 8 | 6387 | 1164 | 18 | 6877 | 3750 | 55 | 1958 | 334 | 17 |
| 50-59 | 284,513 | 85,073 | 30 | 67,428 | 28,154 | 42 | 82,756 | 7,915 | 10 | 56,869 | 10,368 | 18 | 65,000 | 35,887 | 55 | 12,460 | 2,749 | 22 |
| 1960 | 31494 | 9585 | 30 | 8111 | 3326 | 41 | 7488 | 672 | 9 | 6657 | 1256 | 19 | 7182 | 4011 | 56 | 2056 | 320 | 16 |
| 1961 | 33267 | 9987 | 30 | 8524 | 3431 | 40 | 7939 | 626 | 8 | 7149 | 1445 | 20 | 7519 | 4108 | 55 | 2136 | 377 | 18 |
| 1962 | 37030 | 11489 | 31 | 9638 | 3821 | 40 | 8405 | 760 | 9 | 8390 | 1909 | 23 | 8183 | 4554 | 56 | 2414 | 445 | 18 |
| 1963 | 42308 | 13599 | 32 | 11062 | 4557 | 41 | 9399 | 914 | 10 | 10138 | 2303 | 23 | 9055 | 5270 | 58 | 2654 | 555 | 21 |
| 1964 | 50320 | 16656 | 33 | 13359 | 5516 | 41 | 10607 | 1068 | 10 | 12206 | 2738 | 22 | 11053 | 6587 | 60 | 3095 | 747 | 24 |
| 1965 | 55715 | 18812 | 34 | 14721 | 6033 | 41 | 10895 | 1039 | 10 | 13693 | 3038 | 22 | 12896 | 7773 | 60 | 3510 | 929 | 26 |
| 1966 | 63424 | 21837 | 34 | 17022 | 6981 | 41 | 11585 | 1138 | 10 | 15375 | 3381 | 22 | 14203 | 9064 | 60 | 4239 | 1273 | 30 |
| 1967 | 72929 | 25134 | 34 | 19496 | 7806 | 40 | 13058 | 1331 | 10 | 17733 | 3920 | 22 | 17751 | 10588 | 60 | 4891 | 1489 | 30 |
| 1968 | 87774 | 31646 | 36 | 23972 | 10144 | 42 | 15296 | 1630 | 11 | 20522 | 4466 | 22 | 21062 | 13485 | 61 | 5922 | 1921 | 32 |
| 196[illegible] | 104399 | 38275 | 37 | 29495 | 12719 | 43 | 16907 | 1799 | 11 | 23920 | 4969 | 21 | 26555 | 16213 | 61 | 7522 | 2575 | 34 |
| 60-60 | 578,660 | 197,020 | 34 | 155,400 | 64,334 | 41 | 111,579 | 10,977 | 10 | 135,783 | 29,425 | 22 | 137,459 | 81,653 | 59 | 38,439 | 10,631 | 28 |
| 1970 | 116561 | 43180 | 37 | 33854 | 14741 | 44 | 17258 | 1877 | 11 | 25856 | 5158 | 20 | 30848 | 18403 | 60 | 8745 | 3001 | 34 |
| 1971 | 125473 | 47996 | 38 | 38154 | 17037 | 45 | 15958 | 1912 | 12 | 27636 | 5564 | 20 | 31662 | 19959 | 59 | 10063 | 3524 | 35 |
| 1972 | 133604 | 51544 | 39 | 43421 | 20154 | 46 | 15336 | 1817 | 12 | 28317 | 5338 | 19 | 33626 | 20294 | 57 | 10904 | 3941 | 36 |
| 1973 | 140579 | 55583 | 40 | 48096 | 22986 | 48 | 14867 | 2059 | 14 | 30246 | 5919 | 20 | 35994 | 20249 | 56 | 11376 | 4370 | 38 |
| 1974 | 145649 | 59996 | 41 | 52256 | 26407 | 51 | 14418 | 2121 | 15 | 30932 | 6199 | 20 | 35896 | 20582 | 57 | 11947 | 4687 | 39 |
| 1975 | 137864 | 59177 | 43 | 51436 | 27103 | 53 | 14118 | 2439 | 17 | 29314 | 6610 | 23 | 31817 | 18487 | 58 | 11179 | 4538 | 41 |
| 1976 | 132451 | 58548 | 44 | 50363 | 27376 | 54 | 14854 | 2916 | 20 | 28515 | 7205 | 25 | 27970 | 16591 | 59 | 10749 | 4462 | 42 |
| 1977 | 125163 | 57719 | 46 | 47796 | 27102 | 57 | 15342 | 3527 | 23 | 26576 | 7497 | 28 | 24889 | 15187 | 61 | 10462 | 4406 | 42 |
| 1978 | 120518 | 57512 | 48 | 45057 | 26540 | 59 | 15746 | 3933 | 25 | 26245 | 8168 | 31 | 22991 | 14568 | 63 | 10479 | 4303 | 41 |
| 1979 | 115787 | 57117 | 49 | 43012 | 26363 | 61 | 16534 | 4555 | 28 | 25817 | 8620 | 33 | 20545 | 13390 | 65 | 9879 | 4189 | 42 |
| 70-79 | 1,293,629 | 548,372 | 42 | 453,443 | 235,809 | 52 | 156,431 | 27,156 | 18 | 279,456 | 66,278 | 24 | 300,338 | 177,710 | 59 | 105,763 | 41,421 | 39 |
| 1980 | 114779 | 58466 | 51 | 42513 | 26923 | 63 | 17954 | 5430 | 30 | 25658 | 9212 | 36 | 19864 | 12781 | 67 | 9490 | 4120 | 43 |
| 1981 | 110934 | 57430 | 52 | 40833 | 26538 | 65 | 18753 | 5717 | 30 | 24977 | 9181 | 37 | 17272 | 12025 | 70 | 9099 | 3969 | 44 |
| 1982 | 111645 | 58719 | 53 | 41061 | 27408 | 67 | 19876 | 6452 | 32 | 25658 | 9775 | 38 | 16042 | 11271 | 70 | 9008 | 3813 | 42 |
| 1983 | 109302 | 57772 | 53 | 40364 | 27259 | 68 | 20518 | 6825 | 33 | 25791 | 10133 | 39 | 14405 | 9832 | 70 | 8524 | 3723 | 44 |
| 1984 | 108007 | 56666 | 52 | 39872 | 27080 | 68 | 20719 | 7074 | 34 | 25719 | 10066 | 39 | 13325 | 8927 | 68 | 8572 | 3521 | 41 |
| 1985 | 106928 | 56274 | 53 | 39811 | 27117 | 68 | 20711 | 7149 | 35 | 25834 | 10194 | 39 | 12968 | 8267 | 69 | 8604 | 3547 | 41 |
| 1986 | 109153 | 57729 | 53 | 40521 | 27963 | 69 | 21602 | 7439 | 34 | 26439 | 10470 | 40 | 12271 | 8460 | 69 | 8320 | 3417 | 41 |
| 80-86 | 770,748 | 403,056 | 52 | 284,975 | 190,268 | 67 | 140,133 | 46,086 | 33 | 180,076 | 69,029 | 38 | 103,947 | 71,563 | 69 | 61,617 | 26,110 | 42 |
| TOTAL | 2,927,350 | 1,233,521 | 42 | 961,246 | 518,565 | 54 | 488,899 | 92,132 | 19 | 652,182 | 175,100 | 27 | 606,744 | 366,813 | 60 | 218,279 | 80,911 | 37 |

FIELD: Social Sciences

SOURCE: Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report, NSF 81-316, National Science Foundation, September 1981; and 1980-1986 Summary Report, Doctorate Recipients from United States Universities, National Research Council

TABLE 9-4

NUMBER OF Ph.D. RECIPIENTS IN THE SOCIAL SCIENCES BY TYPE OF CITIZENSHIP, 1960-1986

| YEAR | TOTAL | U.S. | FOREIGN | | | Citizenship not Known |
|---|---|---|---|---|---|---|
| | | | TOTAL | Immigrants | Non-Immigrants | |
| 1960 | 1,710 | 1,488 | 204 | 51 | 153 | 18 |
| 1961 | 1,810 | 1,574 | 204 | 38 | 166 | 32 |
| 1962 | 1,925 | 1,647 | 240 | 30 | 210 | 38 |
| 1963 | 2,035 | 1,759 | 230 | 59 | 171 | 46 |
| 1964 | 2,299 | 1,951 | 283 | 70 | 213 | 65 |
| 1965 | 2,379 | 2,028 | 315 | 75 | 240 | 36 |
| 1966 | 2,697 | 2,266 | 361 | 80 | 281 | 70 |
| 1967 | 3,160 | 2,666 | 414 | 126 | 288 | 80 |
| 1968 | 3,534 | 3,029 | 433 | 122 | 311 | 72 |
| 1969 | 4,036 | 3,452 | 505 | 152 | 353 | 79 |
| 1970 | 4,616 | 3,926 | 634 | 204 | 430 | 56 |
| 1971 | 5,285 | 4,503 | 718 | 242 | 476 | 64 |
| 1972 | 5,621 | 4,738 | 771 | 265 | 506 | 112 |
| 1973 | 5,945 | 4,986 | 846 | 258 | 588 | 113 |
| 1974 | 6,017 | 4,919 | 815 | 226 | 589 | 283 |
| 1975 | 6,209 | 5,253 | 839 | 228 | 611 | 117 |
| 1976 | 6,373 | 5,434 | 834 | 195 | 639 | 105 |
| 1977 | 6,365 | 5,340 | 805 | 203 | 602 | 220 |
| 1978 | 6,057 | 5,033 | 735 | 202 | 533 | 289 |
| 1979 | 5,943 | 4,957 | 736 | 179 | 557 | 250 |
| 1980 | 6,253 | 5,296 | 726 | 200 | 526 | 231 |
| 1981 | 6,505 | 5,463 | 772 | 200 | 572 | 270 |
| 1982 | 6,250 | 5,112 | 788 | 201 | 587 | 350 |
| 1983 | 6,055 | 5,020 | 757 | 187 | 570 | 276 |
| 1984 | 5,895 | 4,750 | 828 | 194 | 634 | 317 |
| 1985 | 5,720 | 4,536 | 875 | 212 | 663 | 309 |
| 1986 | 5,841 | 4,550 | 784 | 222 | 672 | 397 |

SOURCE: Federal Civilian Workforce Statistics, Affirmative Employment Statistics, U.S. Office of Personnel Management, 1987

## TABLE 9-5

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN SOCIAL SCIENCES, PSYCHOLOGY AND SOCIAL WORK BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 30, 1986

| OCCUPATIONAL TITLE | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | ASIAN | | AM. INDIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % W | TOTAL | % | WOMEN | % W | No. | % B | No. | % H | No. | % A | No. | % I | No. | % W |
| Social Science | 2918 | 1110 | 38.0 | 650 | 22.3 | 308 | 47.4 | 439 | 15.0 | 121 | 4.1 | 37 | 1.3 | 53 | 1.8 | 2268 | 77.7 |
| Economics | 5799 | 1252 | 21.6 | 529 | 9.1 | 208 | 39.3 | 271 | 4.7 | 101 | 1.7 | 143 | 2.5 | 14 | 0.2 | 5270 | 90.9 |
| Foreign Affairs | 3723 | 766 | 20.6 | 371 | 10.0 | 124 | 33.4 | 178 | 4.8 | 110 | 3.0 | 73 | 2.0 | 10 | 0.3 | 3352 | 90.0 |
| International Relations | 97 | 21 | 21.6 | 10 | 10.3 | 4 | 40.0 | 3 | 3.1 | 3 | 3.1 | 4 | 4.1 | 0 | 0.0 | 87 | 89.7 |
| Foreign Agricultutal Affairs | 167 | 16 | 9.6 | 8 | 4.8 | 2 | 25.0 | 5 | 3.0 | 0 | 0.0 | 1 | 0.6 | 2 | 1.2 | 159 | 95.2 |
| Manpower Research & Analysis | 34 | 11 | 32.4 | 5 | 14.7 | 2 | 40.0 | 5 | 14.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 85.3 |
| Geography | 271 | 72 | 26.6 | 24 | 8.9 | 10 | 41.7 | 11 | 4.1 | 4 | 1.5 | 7 | 2.6 | 2 | 0.7 | 247 | 91.1 |
| History | 699 | 163 | 23.3 | 37 | 5.3 | 14 | 37.8 | 19 | 2.7 | 10 | 1.4 | 6 | 0.9 | 2 | 0.3 | 662 | 94.7 |
| Psychology | 3911 | 1001 | 25.6 | 274 | 7.0 | 114 | 41.6 | 123 | 3.1 | 69 | 1.8 | 53 | 1.4 | 29 | 0.7 | 3637 | 93.0 |
| Sociology | 114 | 41 | 36.0 | 10 | 8.8 | 3 | 30.0 | 4 | 3.5 | 2 | 1.8 | 3 | 2.6 | 1 | 0.9 | 104 | 91.2 |
| Social Work | 4280 | 2106 | 49.2 | 1081 | 25.3 | 644 | 59.6 | 723 | 16.9 | 172 | 4.0 | 63 | 1.5 | 123 | 2.9 | 3199 | 74.7 |
| General Anthropology | 60 | 17 | 28.3 | 5 | 8.3 | 3 | 60.0 | 1 | 1.7 | 1 | 1.7 | 1 | 1.7 | 2 | 3.3 | 55 | 91.7 |
| Archeology | 686 | 219 | 31.9 | 22 | 3.2 | 6 | 27.3 | 0 | 0.0 | 8 | 1.2 | 3 | 0.4 | 11 | 1.6 | 664 | 96.8 |
| TOTALS | 22759 | 6795 | 29.9 | 3026 | 13.3 | 1442 | 47.7 | 1782 | 7.8 | 601 | 2.6 | 396 | 1.7 | 249 | 1.1 | 19733 | 86.7 |

FIELD: Anthropology

SOURCE: 1985 Survey of Departments, American Anthropological Association, August 1985

## TABLE 9-6

ANTHROPOLOGY FACULTY IN ALL DEPARTMENTS BY RANK AND MINORITY STATUS, 1984-85

| ACADEMIC RANK | TOTAL | AM. INDIAN/ ALASKA NATIVE | % I | ASIAN/ PACIFIC ISL. | % A | BLACK | % B | HISPANIC | % H | MINORITY TOTAL | % MINORITY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Professor | 787 | 6 | 0.8 | 16 | 2.0 | 13 | 1.7 | 15 | 1.9 | 50 | 6.4 |
| Associate Professor | 583 | 5 | 0.9 | 12 | 2.1 | 13 | 2.2 | 12 | 2.1 | 42 | 7.2 |
| Assistant Professor | 375 | 1 | 0.3 | 2 | 0.5 | 7 | 1.9 | 2 | 0.5 | 12 | 3.2 |
| Instructor | 28 | 1 | 3.6 | 2 | 7.1 | 7 | 25.0 | 2 | 7.1 | 12 | 42.9 |
| TOTAL | 1,773 | 13 | 0.7 | 32 | 1.8 | 40 | 2.3 | 31 | 1.7 | 116 | 6.5 |

## TABLE 9-7

ANTHROPOLOGY FACULTY IN ALL DEPARTMENTS BY TENURE STATUS, RANK AND SEX, 1984-85

| ACADEMIC RANK | TENURED | | | TENURE TRACK | | | NON-TENURE TRACK | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | WOMEN | % W | TOTAL | WOMEN | % W | TOTAL | WOMEN | % W | TOTAL | WOMEN | % W |
| Professor | 782 | 134 | 17.1 | 3 | 0 | 0.0 | 2 | 2 | 100.0 | 787 | 136 | 17.3 |
| Associate Professor | 554 | 142 | 25.6 | 19 | 6 | 31.6 | 10 | 5 | 50.0 | 583 | 153 | 26.2 |
| Assistant Professor | 59 | 23 | 39.0 | 262 | 107 | 40.8 | 54 | 26 | 48.1 | 375 | 156 | 41.6 |
| Instructor | 2 | 2 | 100.0 | 5 | 3 | 60.0 | 21 | 7 | 33.3 | 28 | 12 | 42.9 |
| TOTAL | 1,397 | 301 | 21.5 | 289 | 116 | 40.1 | 87 | 40 | 46.0 | 1,773 | 457 | 25.8 |

FIELD: Anthropology and Sociology

SOURCE: Doctorate Recipients from United States Universities, Summary Reports 1975, 1977, 1978, 1980, 1984, and 1986, National Research Council

## TABLE 9-8

PERCENT DISTIRBUTION OF DOCTORAL RECIPIENTS IN ANTHROPOLOGY AND SOCIOLOGY BY POSTDOCTORAL PRIMARY WORK ACTIVITY AND SEX, SELECTED YEARS FY 1975 THRU FY 1986

| POSTDOCTORAL PRIMARY WORK ACTIVITY | FY 1975 | | FY 1977 | | FY 1978 | | FY 1980 | | FY1984 | | FY1986 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MEN | WOMEN | MEN | WOMEN | MEN | WOMEN | MEN | WOMEN | MEN | WOMEN | MEN | WOMEN |
| Reseach and Development | 14.5 | 19.3 | 20.2 | 19.4 | 21.3 | 20.1 | 29.6 | 28.3 | 31.2 | 29.5 | 27.6 | 30.6 |
| Teaching | 75.5 | 72.6 | 66.2 | 69.6 | 62.8 | 67.0 | 56.5 | 55.7 | 44.5 | 43.0 | 47.1 | 47.2 |
| Administration | 2.0 | 1.9 | 3.3 | 3.2 | 4.1 | 3.6 | 6.5 | 5.7 | 10.6 | 9.5 | 8.4 | 5.6 |
| Professional Services to Individuals | 1.2 | 0.9 | 2.9 | 1.8 | 2.2 | 1.0 | 1.9 | 2.4 | 5.0 | 8.0 | 8.4 | 7.2 |
| Other | 0.4 | 1.4 | 0.9 | 0.9 | 1.1 | 1.5 | 1.9 | 1.9 | 1.8 | 3.5 | 2.7 | 3.3 |
| Activity Unknown | 6.5 | 3.8 | 6.6 | 5.1 | 8.5 | 6.7 | 3.7 | 6.1 | 6.9 | 6.5 | 5.8 | 6.1 |

FIELD: Social Work and Helping Services

SOURCE: Earned Degrees Conferred Series, 1970-71 thru 1984-85, Department of Education Center for Statistics

## TABLE 9-9

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1970-71 - 1984-85

| YEAR | BACHELOR'S | | | MASTER'S | | | DOCTOR'S | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1970-71 | 4,690 | 3,538 | 75.4 | 6,148 | 3,710 | 60.3 | 126 | 39 | 36.9 |
| 1971-72 | 6,223 | 4,661 | 74.8 | 6,656 | 4,049 | 60.8 | 99 | 31 | 31.3 |
| 1972-73 | 8,182 | 6,035 | 73.7 | 6,896 | 4,353 | 63.1 | 111 | 29 | 26.1 |
| 1973-74 | 9,960 | 7,115 | 71.4 | 7,974 | 4,965 | 62.3 | 109 | 33 | 30.3 |
| 1974-75 | 10,784 | 8,049 | 74.6 | 8,852 | 5,527 | 62.4 | 135 | 48 | 35.5 |
| 1975-76 | 11,032 | 8,350 | 75.7 | 9,002 | 6,012 | 66.8 | 163 | 73 | 44.8 |
| 1976-77 | 11,673 | 9,035 | 77.4 | 9,596 | 6,549 | 68.3 | 131 | 55 | 42.0 |
| 1977-78 | 12,672 | 9,947 | 78.5 | 9,986 | 6,998 | 70.1 | 138 | 66 | 47.8 |
| 1978-79 | 13,180 | 10,608 | 80.5 | 9,893 | 7,025 | 71.0 | 136 | 61 | 44.9 |
| 1979-80 | 12,870 | 10,503 | 81.6 | 10,158 | 7,326 | 72.1 | 162 | 81 | 50.0 |
| 1980-81 | 12,410 | 10,303 | 83.0 | 10,240 | 7,626 | 74.5 | 193 | 104 | 53.9 |
| 1981-82 | 11,813 | 9,946 | 84.2 | 9,959 | 7,664 | 77.0 | 198 | 108 | 54.6 |
| 1982-83 | 11,445 | 9,647 | 84.3 | 9,456 | 7,487 | 79.2 | 215 | 124 | 57.7 |
| 1983-84 | 8,824 | 7,576 | 85.9 | 8,547 | 6,788 | 79.4 | 227 | 132 | 58.2 |
| 1984-85 | 8,063 | 6,899 | 85.6 | 8,900 | 7,183 | 80.2 | 244 | 154 | 63.1 |
| TOTAL | 153,821 | 122,212 | 79.5 | 132,263 | 93,262 | 70.5 | 2,387 | 1,138 | 47.7 |

FIELD: Psychology

SOURCE: Summary Report of 1984-85 Survey of Graduate Departments of Psychology, American Psychological Association, June 1985

## TABLE 9-10

GRADUATE STUDENT ENROLLMENT IN DOCTORAL DEGREE PROGRAMS IN U.S. DEPARTMENTS OF PSYCHOLOGY AND ASSOCIATED FIELDS BY ENROLLMENT STATUS, SPECIALTY, SEX AND RACE/ETHNICITY, 1984-85

| DOCTORAL DEGREE PROGRAM | RACE/ETHNICTY | | | | | | |
|---|---|---|---|---|---|---|---|
| | WHITE | BLACK | HISPANIC | ASIAN | AMERICAN INDIAN | NOT SPECIFIED | TOTAL |
| PRACTICE SPECIALTIES | | | | | | | |
| Full-Time | | | | | | | |
| Men | 3,666 | 190 | 160 | 53 | 14 | 277 | 4,360 |
| H % | 84.1 | 4.3 | 3.7 | 1.2 | 0.3 | 6.4 | 100.0 |
| V % | 43.0 | 33.2 | 37.8 | 29.6 | 41.2 | 40.6 | 41.8 |
| Women | 4,865 | 382 | 263 | 126 | 20 | 405 | 6,061 |
| H % | 80.3 | 6.3 | 4.3 | 2.1 | 0.3 | 4.6 | 100.0 |
| V % | 57.0 | 66.8 | 62.2 | 70.4 | 58.8 | 59.4 | 58.2 |
| Part-Time | | | | | | | |
| Men | 997 | 49 | 23 | 5 | 5 | 160 | 1,239 |
| H % | 80.5 | 3.9 | 1.9 | 0.4 | 0.4 | 12.9 | 100.0 |
| V % | 45.7 | 40.8 | 38.3 | 33.3 | 62.5 | 48.2 | 45.6 |
| Women | 1,183 | 71 | 37 | 10 | 3 | 172 | 1,476 |
| H % | 80.1 | 4.8 | 2.5 | 0.7 | 0.2 | 11.7 | 100.0 |
| V % | 54.3 | 59.2 | 61.7 | 66.7 | 37.5 | 51.8 | 54.4 |
| RESEARCH SPECIALTIES | | | | | | | |
| Full-Time | | | | | | | |
| Men | 2,638 | 84 | 83 | 127 | 5 | 179 | 3,116 |
| H % | 84.7 | 2.7 | 2.7 | 4.0 | 0.2 | 5.7 | 100.0 |
| V % | 45.4 | 35.0 | 42.3 | 45.7 | 50.0 | 48.4 | 45.1 |
| Women | 3,177 | 156 | 113 | 151 | 5 | 191 | 3,793 |
| H % | 83.8 | 4.1 | 3.0 | 4.0 | 0.1 | 5.0 | 100.0 |
| V % | 54.6 | 65.0 | 57.7 | 54.3 | 50.0 | 51.6 | 54.9 |
| Part-Time | | | | | | | |
| Men | 520 | 42 | 7 | 10 | 0 | 72 | 651 |
| H % | 79.9 | 6.4 | 1.1 | 1.5 | 0.0 | 11.1 | 100.0 |
| V % | 41.2 | 33.6 | 36.8 | 40.0 | 0.0 | 45.3 | 40.9 |
| Women | 743 | 83 | 12 | 15 | 1 | 87 | 941 |
| H % | 79.0 | 8.8 | 1.3 | 1.6 | 0.1 | 9.2 | 100.0 |
| V % | 58.8 | 66.4 | 63.2 | 60.0 | 100.0 | 54.7 | 59.1 |

FIELD: Psychology

SOURCE: Summary Report of 1984-85 Survey of Graduate Departments of Psychology, American Psychological Association, June 1985

## TABLE 9-11

GRADUATE STUDENT ENROLLMENT IN MASTER'S DEGREE PROGRAMS IN U.S. DEPARTMENTS OF PSYCHOLOGY AND ASSOCIATED FIELDS BY ENROLLMENT STATUS, SPECIALTY, SEX AND RACE/ETHNICITY, 1984-85

| MASTER'S DEGREE PROGRAM | RACE/ETHNICITY | | | | | | |
|---|---|---|---|---|---|---|---|
| | WHITE | BLACK | HISPANIC | ASIAN | AMERICAN INDIAN | NOT SPECIFIED | TOTAL |
| PRACTICE SPECIALTIES | | | | | | | |
| Full-Time | | | | | | | |
| Men | 1,581 | 121 | 75 | 36 | 11 | 109 | 1,933 |
| H % | 81.8 | 6.2 | 3.9 | 1.9 | 0.6 | 5.6 | 100.0 |
| V % | 33.0 | 35.9 | 38.7 | 39.1 | 42.3 | 26.7 | 33.1 |
| Women | 3,203 | 216 | 119 | 56 | 15 | 299 | 3,908 |
| H % | 82.0 | 5.5 | 3.0 | 1.4 | 0.4 | 7.7 | 100.0 |
| V % | 67.0 | 64.1 | 61.3 | 60.9 | 57.7 | 73.3 | 66.9 |
| Part-Time | | | | | | | |
| Men | 1,607 | 126 | 67 | 13 | 14 | 161 | 1,988 |
| H % | 80.8 | 6.3 | 3.4 | 0.7 | 0.7 | 8.1 | 100.0 |
| V % | 34.3 | 39.1 | 38.3 | 26.5 | 33.3 | 36.0 | 34.7 |
| Women | 3,079 | 196 | 108 | 36 | 28 | 286 | 3,733 |
| H % | 82.5 | 5.2 | 2.9 | 1.0 | 0.7 | 7.7 | 100.0 |
| V % | 65.7 | 60.9 | 61.7 | 73.5 | 66.7 | 64.0 | 65.3 |
| RESEARCH SPECIALTIES | | | | | | | |
| Full-Time | | | | | | | |
| Men | 689 | 45 | 19 | 30 | 0 | 148 | 931 |
| H % | 74.0 | 4.8 | 2.0 | 3.2 | 0.0 | 16.0 | 100.0 |
| V % | 39.6 | 38.5 | 32.2 | 32.3 | 0.0 | 31.0 | 37.4 |
| Women | 1,052 | 72 | 40 | 63 | 2 | 329 | 1,558 |
| H % | 67.5 | 4.6 | 2.6 | 4.1 | 0.1 | 21.1 | 100.0 |
| V % | 60.4 | 61.5 | 67.8 | 67.7 | 100.0 | 69.0 | 62.6 |
| Part-Time | | | | | | | |
| Men | 1,607 | 126 | 67 | 13 | 147 | 161 | 1,998 |
| H % | 80.8 | 6.3 | 3.4 | 0.7 | 0.7 | 8.1 | 100.0 |
| V % | 34.3 | 39.1 | 38.3 | 26.5 | 33.3 | 36.0 | 34.7 |
| Women | 3,079 | 196 | 108 | 36 | 28 | 286 | 3,733 |
| H % | 82.5 | 5.2 | 2.9 | 1.0 | 0.7 | 7.7 | 100.0 |
| V % | 65.7 | 60.9 | 61.7 | 73.5 | 66.7 | 64.0 | 65.3 |

FIELD: PSYCHOLOGY

SOURCE: 1984 Doctorate Employment Survey, Preliminary Report, American Psychological Association

## TABLE 9-12

EMPLOYMENT STATUS OF 1984 DOCTORATE RECIPIENTS BY SEX AND ETHNICITY

| | Employed full time N | (%) | Employed part time N | (%) | Postdoctoral fellow N | (%) | Unemployed, seeking N | (%) | Unemployed, not seeking N | (%) | Total N (100%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All respondents | 1591 | (78.6) | 142 | (7.0) | 235 | (11.6) | 37 | (1.8) | 20 | (1.0) | 2025 |
| Sex | | | | | | | | | | | |
| Men | 864 | (84.8) | 27 | (2.6) | 113 | (11.1) | 13 | (1.3) | 2 | (0.2) | 1019 |
| Women | 724 | (72.2) | 115 | (11.5) | 122 | (12.2) | 23 | (2.3) | 18 | (1.8) | 1002 |
| Not specified | 3 | (75.0) | 0 | (0.0) | 0 | (0.0) | 1 | (25.0) | 0 | (0.0) | 4 |
| Ethnicity | | | | | | | | | | | |
| White | 1462 | (78.5) | 137 | (7.4) | 217 | (11.7) | 28 | (1.5) | 18 | (1.0) | 1862 |
| Black | 48 | (84.2) | 3 | (5.3) | 5 | (8.8) | 1 | (1.8) | 0 | (0.0) | 57 |
| Hispanic | 34 | (75.6) | 0 | (0.0) | 6 | (13.3) | 4 | (8.9) | 1 | (2.2) | 45 |
| Asian | 24 | (68.6) | 0 | (0.0) | 7 | (20.0) | 3 | (8.6) | 1 | (2.9) | 35 |
| American Indian | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 |
| Not specified | 22 | (88.0) | 2 | (8.0) | 0 | (0.0) | 1 | (4.0) | 0 | (0.0) | 25 |

SOURCE: "Census of Psychological Personnel: 1983", American Psychologist, December 1985, American Psychological Association

## TABLE 9-13

SEX AND ETHNICITY OF PSYCHOLOGISTS INVOLVED IN HEALTH/MENTAL HEALTH SERVICES, BY HIGHEST DEGREE

| Characteristic | Doctoral N | Doctoral Col. % | Doctoral Emp. % | Master's N | Master's Col. % | Master's Emp. % | Total* N | Total* Col. % |
|---|---|---|---|---|---|---|---|---|
| Sex | | | | | | | | |
| Male | 23,623 | 67.6 | 66.9 | 7,547 | 48.0 | 76.6 | 32,468 | 60.7 |
| Female | 11,315 | 32.4 | 73.0 | 8,153 | 51.9 | 80.1 | 20,927 | 39.2 |
| Not specified | 29 | 0.1 | 55.8 | 22 | 0.1 | 56.4 | 58 | 0.1 |
| Ethnicity | | | | | | | | |
| White | 33,615 | 96.1 | 69.0 | 15,072 | 95.9 | 78.5 | 51,328 | 96.0 |
| Black | 687 | 2.0 | 65.4 | 391 | 2.5 | 72.7 | 1,148 | 2.1 |
| Asian | 350 | 1.0 | 59.9 | 107 | 0.7 | 74.3 | 474 | 0.9 |
| American Indian | 86 | 0.2 | 76.1 | 39 | 0.2 | 84.8 | 134 | 0.3 |
| Not specified | 229 | 0.7 | 58.9 | 113 | 0.7 | 72.4 | 369 | 0.7 |
| Hispanic origin | 558 | 1.6 | 77.4 | 277 | 1.8 | 78.7 | 878 | 1.6 |

FIELD: PSYCHOLOGY

SOURCE: "Census of Psychological Personnel: 1983", American Psychologist, December 1985, American Psychological Association

TABLE 9-14

SEX AND ETHNICITY OF PSYCHOLOGISTS EMPLOYED IN RESEARCH ACTIVITIES, BY HIGHEST DEGREE, 1983

| Characteristic | Doctoral | | | Master's | | | Total* | |
|---|---|---|---|---|---|---|---|---|
| | N | Col % | Emp % | N | Col % | Emp % | N | Col % |
| Sex | | | | | | | | |
| Male | 20,027 | 72.7 | 56.7 | 3,004 | 56.9 | 30.5 | 23,704 | 69.7 |
| Female | 7,512 | 27.3 | 48.5 | 2,271 | 43.0 | 22.3 | 10,286 | 30.2 |
| Not specified | 24 | 0.1 | 46.2 | 7 | 0.1 | 17.9 | 32 | 0.1 |
| Ethnicity | | | | | | | | |
| White | 26,281 | 95.3 | 54.0 | 5,031 | 95.2 | 26.2 | 32,427 | 95.3 |
| Black | 614 | 2.2 | 58.5 | 136 | 2.6 | 25.3 | 787 | 2.3 |
| Asian | 361 | 1.3 | 61.8 | 45 | 0.9 | 31.3 | 413 | 1.2 |
| American Indian | 72 | 0.3 | 63.7 | 21 | 0.4 | 45.7 | 102 | 0.3 |
| Not specified | 235 | 0.9 | 60.4 | 49 | 0.9 | 31.4 | 293 | 0.9 |
| Hispanic origin | 396 | 1.4 | 54.9 | 94 | 1.8 | 26.7 | 513 | 1.5 |

TABLE 9-15

SEX AND ETHNICITY OF PSYCHOLOGISTS IN EDUCATIONAL ACTIVITIES BY HIGHEST DEGREE, 1983

| Characteristic | Doctoral | | | Master's | | | Total* | |
|---|---|---|---|---|---|---|---|---|
| | N | Col % | Emp % | N | Col % | Emp % | N | Col % |
| Sex | | | | | | | | |
| Male | 26,145 | 70.0 | 74.1 | 6,571 | 48.1 | 66.7 | 33,994 | 63.3 |
| Female | 11,150 | 29.9 | 72.0 | 7,087 | 51.8 | 69.6 | 19,624 | 36.6 |
| Not specified | 32 | 0.1 | 61.5 | 13 | 0.1 | 33.3 | 51 | 0.1 |
| Ethnicity | | | | | | | | |
| White | 35,658 | 95.5 | 73.2 | 13,065 | 95.6 | 68.1 | 51,271 | 95.5 |
| Black | 856 | 2.3 | 81.5 | 388 | 2.8 | 72.1 | 1,316 | 2.5 |
| Asian | 435 | 1.2 | 74.5 | 96 | 0.7 | 66.7 | 545 | 1.0 |
| American Indian | 92 | 0.2 | 81.4 | 33 | 0.2 | 71.7 | 136 | 0.3 |
| Not specified | 286 | 0.8 | 73.5 | 89 | 0.7 | 57.1 | 401 | 0.7 |
| Hispanic origin | 526 | 1.4 | 73.0 | 203 | 1.5 | 57.7 | 775 | 1.4 |

SOURCE: Summary Report of 1985-86 Survey of Graduate Departments of Psychology, American Psychological Association

TABLE 9-16

CHARACTERISTICS OF FACULTY IN U.S. GRADUATE DEPARTMENTS OF PSYCHOLOGY BY SEX AND RACE/ETHNICITY, 1985-86

| FACULTY CHARACTERISTICS | Ph.D. DEPTS | | MASTER'S DEPTS. | | ALL DEPTS. | |
|---|---|---|---|---|---|---|
| | No. | V % | No. | V % | No. | V % |
| NUMBER OF DEPARTMENTS | 225 | - | 106 | - | 331 | - |
| TOTAL FACULTY | 5,287 | 100.0 | 1,381 | 100.0 | 6,668 | 100.0 |
| Men | 4,079 | 77.2 | 1,010 | 73.1 | 5,089 | 76.3 |
| Women | 1,170 | 22.1 | 355 | 25.7 | 1,525 | 24.4 |
| Not Specified | 38 | 0.7 | 16 | 1.2 | 54 | 0.8 |
| BY RACE | | | | | | |
| White | 4,921 | 93.1 | 1,301 | 94.2 | 6,222 | 93.3 |
| Black | 140 | 2.6 | 30 | 2.2 | 170 | 2.6 |
| Hispanic | 68 | 1.3 | 17 | 1.2 | 85 | 1.3 |
| Asian | 49 | 0.9 | 14 | 1.0 | 63 | 0.9 |
| American Indian | 6 | 0.1 | 1 | 0.1 | 7 | 0.1 |
| Not Specified | 103 | 1.9 | 18 | 1.3 | 121 | 1.8 |

FIELD: Political Science

SOURCE: "Job Market Remains Stable for Political Scientists", by Robert J-P. Hauck, PS, Summer, 1986 and Graduate Students and Faculty in Political Science: Ph.D. and M.A. Degrees, 1987, American Political Science Association

## TABLE 9-17

FIRST-TIME ENROLLMENTS IN Ph.D. PROGRAMS IN POLITICAL SCIENCE, FALL 1974-86

| YEAR | TOTAL | WOMEN | | BLACK | |
|---|---|---|---|---|---|
| | | NUMBER | % | NUMBER | % |
| Fall, 1986 | 953 | 261 | 27.4 | 41 | 4.3 |
| Fall, 1985 | 933 | 286 | 30.7 | 52 | 5.6 |
| Fall, 1984 | 936 | 264 | 28.2 | 48 | 5.1 |
| Fall, 1983 | 838 | 230 | 27.4 | 51 | 6.1 |
| Fall, 1982 | 772 | 208 | 26.9 | 39 | 5.1 |
| Fall, 1981 | 1,042 | 299 | 28.7 | 76 | 7.3 |
| Fall, 1980 | 1,068 | 301 | 28.2 | 104 | 9.7 |
| Fall, 1979 | 1,100 | 305 | 27.7 | 101 | 9.2 |
| Fall, 1978 | 1,051 | 255 | 24.3 | 102 | 9.7 |
| Fall, 1977 | 1,182 | 270 | 22.8 | 111 | 9.4 |
| Fall, 1976 | 1,064 | 274 | 25.8 | 100 | 9.4 |
| Fall, 1975 | 1,174 | 270 | 23.0 | 129 | 11.0 |
| Fall, 1974 | 1,443 | 342 | 23.7 | 131 | 9.1 |

## TABLE 9-18

TOTAL ENROLLMENTS IN Ph. D. PROGRAMS IN POLITICAL SCIENCE, 1974-75 - 1986-87

| YEAR | TOTAL | WOMEN | | BLACK | | FOREIGN | |
|---|---|---|---|---|---|---|---|
| | | NUMBER | % | NUMBER | % | NUMBER | % |
| 1986-87 | 4,837 | 1,345 | 27.8 | 228 | 4.7 | 1,305 | 27.0 |
| 1985-86 | 4,894 | 1,394 | 27.6 | 277 | 5.7 | 1,292 | 26.4 |
| 1984-85 | 4,994 | 1,353 | 27.1 | 274 | 5.5 | 1,345 | 26.9 |
| 1983-84 | 4,171 | 1,105 | 26.5 | 207 | 5.0 | 1,075 | 25.8 |
| 1981-82 | 5,491 | 1,505 | 27.4 | 319 | 5.8 | 1,818 | 21.5 |
| 1980-81 | 5,756 | 1,415 | 24.6 | 373 | 6.5 | 1,212 | 21.1 |
| 1979-80 | 5,888 | 1,384 | 23.5 | 406 | 6.9 | 1,146 | 19.5 |
| 1978-79 | 5,742 | 1,258 | 21.9 | 432 | 7.5 | 948 | 16.5 |
| 1977-78 | 5,737 | 1,278 | 22.3 | 413 | 7.2 | 819 | 14.3 |
| 1976-77 | 5,462 | 1,209 | 22.1 | 402 | 7.4 | 813 | 14.9 |
| 1975-76 | 6,150 | 1,475 | 24.0 | 435 | 7.1 | * | * |
| 1974-75 | 6,150 | 1,250 | 20.3 | 435 | 7.1 | * | * |

FIELD: Political Science

SOURCE: "Job Market Remains Stable for Political Scientists," by Robert J-P. Hauck, PS, Summer, 1986

## TABLE 9-19

PLACEMENT OF NEW PHD RECIPIENTS BY TYPE OF HIRING INSTITUTION, 1980 - 1985

(Percentage)

| | Total | | | | | | Men | | | | | | Women | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
| Ph.D. department | 31 | 36 | 29 | 34 | 37 | 37 | 32 | 36 | 29 | 32 | 36 | 38 | 38 | 35 | 31 | 40 | 40 | 35 |
| M.A. department | 17 | 18 | 20 | 18 | 17 | 18 | 16 | 18 | 20 | 18 | 19 | 16 | 20 | 13 | 18 | 15 | 12 | 23 |
| Undergraduate political science | 22 | 25 | 25 | 27 | 24 | 23 | 21 | 24 | 26 | 27 | 24 | 23 | 26 | 33 | 21 | 29 | 27 | 22 |
| Undergraduate social science | 4 | 2 | 4 | 1 | 3 | 3 | 4 | 2 | 3 | – | 2 | 3 | 5 | – | 6 | 8 | 3 | 3 |
| Two-year college | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 6 | – | – | 1 |
| Nonacademic | 24 | 18 | 24 | 19 | 18 | 17 | 24 | 18 | 20 | 21 | 18 | 18 | 19 | 18 | 17 | 4 | 19 | 16 |
| Total | 100 | 101 | 99 | 100 | 100 | 100 | 99 | 100 | 101 | 100 | 101 | 100 | 100 | 100 | 99 | 96 | 101 | 100 |

## TABLE 9-20

PLACEMENT SUCCESS BY FIELD OF SPECIALIZATION AND SEX, 1980 - 1985

(Percentage)

| | Total | | | | | | Men | | | | | | Women | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
| Placement Success[a] | | | | | | | | | | | | | | | | | | |
| American Government | 74 | 85 | 71 | 99 | 80 | 86 | 75 | 85 | 73 | 100 | 79 | 87 | 71 | 83 | 66 | 96 | 88 | 84 |
| Public Policy | 64 | 94 | 81 | 60 | 83 | 58 | 61 | 100 | 87 | 54 | 88 | 56 | 78 | 75 | 67 | 75 | 71 | 63 |
| Comparative/Area Studies | 55 | 59 | 52 | 73 | 67 | 57 | 55 | 60 | 46 | 75 | 66 | 59 | 55 | 56 | 74 | 67 | 54 | 51 |
| International Relations | 64 | 57 | 52 | 66 | 67 | 59 | 62 | 54 | 51 | 75 | 62 | 60 | 80 | 79 | 61 | 31 | 93 | 55 |
| Public Administration | 97 | 91 | 100 | 73 | 90 | 86 | 96 | 100 | 100 | 62 | 89 | 89 | 100 | 80 | 67 | 100 | 91 | 78 |
| Political Theory | 57 | 68 | 42 | 43 | 60 | 67 | 47 | 65 | 41 | 45 | 58 | 57 | 65 | 78 | 57 | 30 | 71 | – |
| Methodology | 50 | 81 | 88 | 80 | 100 | 40 | 60 | 83 | 100 | 80 | 100 | 25 | 50 | 100 | 100 | – | – | 100 |
| Other | 100 | 100 | 100 | 85 | 100 | – | 100 | 43 | 100 | 29 | 100 | 42 | 100 | 100 | 100 | 67 | 100 | – |
| Percentage of Those Placed[b] | | | | | | | | | | | | | | | | | | |
| American Government | 29 | 30 | 30 | 30 | 29 | 26 | 28 | 28 | 30 | 28 | 22 | 16 | 32 | 35 | 32 | 40 | 7 | 9 |
| Public Policy | 7 | 8 | 10 | 11 | 11 | 7 | 6 | 9 | 9 | 9 | 8 | 5 | 8 | 7 | 9 | 20 | 3 | 2 |
| Comparative/Area Studies | 22 | 21 | 20 | 19 | 22 | 22 | 22 | 20 | 18 | 20 | 15 | 15 | 21 | 22 | 23 | 15 | 6 | 6 |
| International Relations | 17 | 13 | 19 | 14 | 16 | 20 | 15 | 13 | 19 | 16 | 12 | 16 | 14 | 13 | 18 | 5 | 4 | 4 |
| Public Administration | 7 | 10 | 25 | 10 | 8 | 9 | 7 | 11 | 5 | 9 | 5 | 7 | 6 | 5 | 9 | 10 | 3 | 2 |
| Political Theory | 11 | 12 | 9 | 9 | 9 | 13 | 10 | 13 | 10 | 10 | 7 | 9 | 13 | 11 | 5 | 5 | 1 | 3 |
| Methodology | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 3 | 3 | 1 | 1 | 0 | 0 | 4 | – | – | – | 0 |
| Other | 7 | 2 | 5 | 6 | 4 | 5 | 8 | 2 | 5 | 5 | 3 | 4 | 5 | 2 | 5 | 5 | 1 | 1 |

[a]Placement success measures number placed in a field as a percentage of total candidates in each of the respective fields.

[b]Percentage of those placed measures the total number placed in a particular field as a percentage of the total number placed in all fields.

FIELD: Political Science

SOURCE: "Job Market Remains Stable for Political Scientists" by Robert J.P. Hauck, PS. Summer 1986, American Political Science Association

## TABLE 9-21

PLACEMENT OF JOB CANDIDATES IN POLITICAL SCIENCE BY SEX, 1980-1985

| | TOTAL* | MEN | WOMEN |
|---|---|---|---|
| **Number of Firm Candidates** | | | |
| 1980 | 779 | 630 | 149 |
| 1981 | 667 | 596 | 101 |
| 1982 | 611 | 485 | 126 |
| 1983 | 523 | 390 | 133 |
| 1984 | 672 | 504 | 168 |
| 1985 | 715 | 522 | 193 |
| **Number Placed** | | | |
| 1980 | 560 | 451 | 109 |
| 1981 | 511 | 437 | 75 |
| 1982 | 379 | 298 | 81 |
| 1983 | 414 | 326 | 88 |
| 1984 | 485 | 365 | 119 |
| 1985 | 497 | 363 | 134 |
| **Placement Success (%)** | | | |
| 1980 | 68 | 68 | 68 |
| 1981 | 73 | 73 | 73 |
| 1982 | 62 | 61 | 64 |
| 1983 | 79 | 79 | 66 |
| 1984 | 72 | 72 | 71 |
| 1985 | 70 | 70 | 69 |
| **Percent in Temporary Positions** | | | |
| 1980 | 33 | 32 | 35 |
| 1981 | 28 | 28 | 28 |
| 1982 | 36 | 37 | 36 |
| 1983 | 33 | 32 | 39 |
| 1984 | 33 | 33 | 34 |
| 1985 | 43 | 43 | 43 |

*Adjusted Total

FIELD: Political Science

SOURCE: "Job Market Remains Stable for Political Scientists," by Robert J-P. Hauck, PS, Summer, 1986

## TABLE 9-22

PERCENTAGE OF WOMEN ON POLITICAL SCIENCES FACULTY BY RANK, TYPE OF INSTITUTION AND YEAR, 1978-1984

| | PROFESSOR | | | | ASSOCIATE PROFESSOR | | | | ASSISTANT PROFESSOR | | | | INSTRUCTOR | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | ALL | PH.D. | M.A. | B.A. | ALL | PH.D. | M.A. | B.A. | ALL | PH.D. | M.A. | B.A. | ALL | PH.D. | M.A. | B.A. |
| 1978 | 4.9 | 2.8 | 6.6 | 6.3 | 9.5 | 7.3 | 8.6 | 10.6 | 10.7 | 29.4 | 19.0 | 27.7 | 33.0 | 26.6 | 25.0 | 28.0 |
| 1979 | 4.9 | 2.9 | 7.0 | 6.2 | 10.4 | 10.3 | 10.2 | 10.76 | 22.0 | 27.2 | 16.3 | 19.6 | 28.8 | 28.1 | 39.3 | 34.0 |
| 1980 | 5.5 | 4.0 | 7.3 | 5.8 | 11.5 | 11.3 | 11.1 | 11.2 | 23.3 | 25.4 | 23.4 | 21.9 | 12.0 | 35.4 | 31.0 | 27.1 |
| 1981 | 5.6 | 4.2 | 7.1 | 7.2 | 13.2 | 12.2 | 11.3 | 14.6 | 25.1 | 26.5 | 24.0 | 20.4 | 12.5 | 25.0 | 45.4 | 21.1 |
| 1982 | 5.5 | 3.5 | 6.5 | 7.7 | 13.3 | 15.5 | 12.0 | 12.4 | 26.4 | 28.5 | 21.8 | 31.1 | 12.9 | 35.4 | 33.3 | 41.1 |
| 1983 | 5.6 | 4.3 | 6.9 | 6.3 | 17.5 | 15.7 | 11.3 | 11.4 | 22.5 | 23.0 | 21.8 | 29.9 | 13.1 | 41.6 | 21.4 | 15.0 |
| 1984 | 6.2 | 3.5 | 8.2 | 8.0 | 13.7 | 14.7 | 12.9 | 12.4 | 21.9 | 21.7 | 19.7 | 13.6 | 28.6 | 25.0 | 34.3 | 27.7 |

## TABLE 9-23

FULL TIME FACULTY IN TENURE TRACK AND TENURED POSITIONS BY SEX, 1984-85

| | PROFESSOR | | ASSOCIATE | | ASSISTANT | | INSTRUCTOR | |
|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1983 | 1984 | 1983 | 1984 | 1983 | 1984 |
| Men | 2,320 | 2,226 | 1,679 | 1,397 | 1,057 | 893 | 201 | 100 |
| Women | 132 | 148 | 295 | 222 | 238 | 250 | 27 | 40 |
| Percent Women | 5.6 | 6.2 | 17.5 | 13.7 | 22.5 | 21.9 | 13.4 | 28.6 |

FIELD: Humanities

SOURCE: Doctorates Awarded from 1920 to 1971 by Subfield of Doctorate, Sex and Decade, March 1973, and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 10-1

### DOCTORATES AWARDED IN THE HUMANITIES FROM 1920 TO 1986 BY SUBFIELD OF DOCTORATE AND SEX

| | CY 1920-FY 1972 | | | FY 1973-FY 1982 | | | FY 1983-FY 1984 | | | FY 1985 | | | FY 1986 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W |
| ARTS & HUMANITIES TOTAL | 60,010 | 12,663 | 21.1 | 44,548 | 16,083 | 36.1 | 7,022 | 3,116 | 44.4 | 3,428 | 1,489 | 43.4 | 3,461 | 1,565 | 45.2 |
| History, Am., European, Gen.& Other(1) | 15,556 | 2,076 | 13.3 | 5,480 | 1,066 | 19.5 | | | | | | | | | |
| History, American (1) | | | | 1,403 | 328 | 23.4 | 463 | 156 | 33.7 | 175 | 49 | 28.0 | 196 | 68 | 34.7 |
| History, European (1) | | | | 949 | 273 | 28.8 | 318 | 97 | 30.5 | 142 | 56 | 39.4 | 121 | 44 | 36.4 |
| History of Science (2) | 74 | 10 | 13.5 | 283 | 107 | 37.8 | 37 | 18 | 48.6 | 23 | 2 | 8.7 | 24 | 10 | 41.7 |
| History, Gen. & Other (1,3) | | | | 1,328 | 356 | 26.8 | 414 | 134 | 32.4 | 203 | 71 | 35.0 | 222 | 62 | 27.9 |
| Classics (4) | 2,236 | 682 | 30.5 | 704 | 244 | 34.7 | 101 | 39 | 38.6 | 44 | 18 | 40.9 | 51 | 15 | 29.4 |
| Comparative Literature (5) | | | | 876 | 497 | 56.7 | 257 | 155 | 60.3 | 133 | 80 | 60.2 | 101 | 62 | 61.4 |
| Linguistics | 1,502 | 358 | 23.8 | 1,788 | 728 | 40.7 | 324 | 166 | 51.9 | 176 | 91 | 51.7 | 189 | 96 | 50.8 |
| Speech & Debate (6) | 4,357 | 717 | 16.5 | 931 | 282 | 30.3 | 89 | 39 | 43.8 | 38 | 17 | 44.7 | 30 | 11 | 36.7 |
| Letters, General (7) | | | | | | | 17 | 8 | 47.1 | 13 | 8 | 61.5 | 19 | 14 | 73.7 |
| Letters, Other (7) | | | | | | | 50 | 28 | 56.0 | 26 | 15 | 57.7 | 37 | 21 | 56.8 |
| American Studies (8) | | | | 586 | 243 | 41.5 | 174 | 78 | 44.8 | 87 | 42 | 48.3 | 68 | 38 | 55.9 |
| Archeology | 314 | 114 | 36.3 | 250 | 116 | 46.4 | 61 | 39 | 63.9 | 24 | 9 | 37.5 | 28 | 14 | 50.0 |
| Art, Fine & Applied (9) | 889 | 246 | 27.7 | 20 | 4 | 20.0 | | | | | | | | | |
| Art History & Criticism (9) | 346 | 155 | 44.8 | 1,434 | 838 | 58.4 | 291 | 205 | 70.4 | 137 | 96 | 70.1 | 126 | 92 | 73.0 |
| Music | 2,501 | 348 | 13.9 | 3,824 | 976 | 25.5 | 833 | 259 | 31.1 | 447 | 140 | 31.3 | 476 | 171 | 35.9 |
| Philosophy | 5,133 | 631 | 12.3 | 3,557 | 582 | 16.4 | 456 | 111 | 24.3 | 238 | 42 | 17.6 | 248 | 50 | 20.2 |
| Religion (10) | | | | 1,591 | 429 | 27.0 | 351 | 82 | 23.4 | 181 | 33 | 18.2 | 180 | 33 | 18.3 |
| Theater (11) | | | | 386 | 154 | 39.9 | 208 | 91 | 43.8 | 92 | 38 | 41.3 | 87 | 39 | 44.8 |
| Amer. & Eng. Lang. & Lit. (12) | 11,782 | 2,715 | 23.0 | | | | | | | | | | | | |
| American Lang. & Lit. (12) | 779 | 235 | 30.2 | 2,157 | 898 | 41.6 | 362 | 194 | 53.6 | 203 | 95 | 46.8 | 215 | 122 | 56.7 |
| English Lang. & Lit. (12) | 3,867 | 1,236 | 32.0 | 8,682 | 3,867 | 44.5 | 1,086 | 591 | 54.4 | 525 | 302 | 57.5 | 506 | 299 | 59.1 |
| French Lang. & Lit. (13) | 1,529 | 661 | 43.2 | 2,057 | 1,327 | 64.5 | 229 | 161 | 70.3 | 86 | 61 | 70.9 | 102 | 76 | 74.5 |
| German Lang. & Lit. (13) | 1,142 | 335 | 29.3 | 1,328 | 658 | 49.5 | 157 | 88 | 56.1 | 62 | 32 | 51.6 | 79 | 44 | 55.7 |
| Italian Lang. & Lit. (13) | 108 | 34 | 31.5 | 203 | 86 | 42.4 | 38 | 22 | 57.9 | 14 | 6 | 42.9 | 15 | 7 | 46.7 |
| Spanish Lang. & Lit. (14) | 1,338 | 451 | 33.7 | 2,012 | 965 | 48.0 | 305 | 170 | 55.7 | 145 | 91 | 62.8 | 122 | 74 | 60.7 |
| Russian Lang. & Lit. (13) | 273 | 85 | 31.1 | 571 | 224 | 39.2 | 57 | 27 | 47.4 | 28 | 15 | 53.6 | 28 | 14 | 50.0 |
| Slavic Lang. & Lit. (13) | 48 | 11 | 22.9 | | | | 21 | 13 | 61.9 | 10 | 3 | 30.0 | 8 | 2 | 25.0 |
| Chinese Lang. & Lit. (15) | | | | | | | 29 | 15 | 51.7 | 14 | 7 | 50.0 | 13 | 5 | 38.5 |
| Japanese Lang. & Lit. (15) | | | | | | | 17 | 12 | 70.6 | 13 | 3 | 23.1 | 9 | 7 | 77.8 |
| Hebrew Lang. & Lit. (15) | | | | | | | 24 | 4 | 16.7 | 9 | 3 | 33.3 | 11 | 4 | 36.4 |
| Arabic Lang. & Lit. (15) | | | | | | | 16 | 4 | 25.0 | 5 | 1 | 20.0 | 9 | 2 | 22.2 |
| Other Languages (13) | 5,161 | 1,330 | 25.8 | 1,039 | 346 | 33.3 | 103 | 44 | 42.7 | 49 | 19 | 38.8 | 49 | 20 | 40.8 |
| Humanities, General (16) | 415 | 57 | 13.7 | 225 | 101 | 44.9 | 39 | 18 | 46.2 | 27 | 11 | 40.7 | 23 | 11 | 47.8 |
| Humanities, Other | 660 | 176 | 26.7 | 884 | 388 | 43.9 | 95 | 46 | 48.4 | 59 | 33 | 55.9 | 69 | 38 | 55.1 |

(1) Separated into 'History, American, European,' and 'History, Other' in 1978. (2) Added in 1970 as 'History and Philosophy of Science.' Renamed 'History of Science' in 1984. (3) 'History, Other' combined with 'History, General' in 1983. (4) Name changed from 'Foreign Language & Lit., Classical' in 1966 and renamed 'Classics' in 1983. (5) Added in 1976. (6) Originally named 'Speech as a Dramatic Art.' In 1962, 'Dramatic Arts' was added. (7) Added in 1983. (8) Added in 1973. (9) In 1968, 'Art, Fine & Applied' was broken out into 'Art, Applied' & 'Art, History & Criticism.' (10) Added in 1975. (11) Added in 1978 as 'Theater and Theater Criticism.' Renamed 'Theater' in 1983. (12) This group was separated in 1968. (13) Called 'Modern Foreign Language, Unspecified' until 1965, 'Other Languages' in 1979, and separated in 1983. (14) 'Spanish and Portuguese' prior to 1983. (15) Separated from 'Other Languages' in 1983.

FIELD: Linguistics

SOURCE: Earned Degrees Conferred Series, 1947-48 thru 1982-86, Department of Education
Center for Statistics

## TABLE 10-2

DEGREES AWARDED BY SEX AND LEVEL OF DEGEE, 1947-48 - 1985-86

| YEAR | BACHELOR'S | | | MASTER's | | |
|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1955-56 thru 1959-60 | 171 | 76 | 44.4 | 287 | 113 | 39.4 |
| 1960-61 thru 1969-70 | 1,127 | 575 | 51.0 | 2,066 | 859 | 42.8 |
| 1970-71 | 254 | 171 | 67.3 | 352 | 179 | 50.8 |
| 1971-72 | 296 | 186 | 62.8 | 373 | 199 | 53.4 |
| 1972-73 | 443 | 290 | 65.5 | 452 | 228 | 50.4 |
| 1973-74 | 431 | 315 | 73.1 | 455 | 248 | 54.5 |
| 1974-75 | 434 | 305 | 70.3 | 506 | 279 | 55.1 |
| 1975-76 | 534 | 371 | 69.5 | 525 | 313 | 59.8 |
| 1976-77 | 564 | 399 | 70.7 | 552 | 326 | 59.1 |
| 1977-78 | 596 | 408 | 68.5 | 522 | 313 | 60.0 |
| 1978-79 | 585 | 408 | 69.7 | 503 | 297 | 59.0 |
| 1979-80 | 553 | 418 | 75.6 | 522 | 315 | 60.3 |
| 1980-81 | 551 | 408 | 74.0 | 498 | 307 | 61.6 |
| 1981-82 | 534 | 376 | 70.4 | 516 | 305 | 59.1 |
| 1982-83 | 472 | 355 | 75.2 | 597 | 357 | 59.8 |
| 1983-84 | 476 | 333 | 70.0 | 678 | 427 | 63.0 |
| 1984-85 | 490 | 350 | 71.4 | 633 | 409 | 64.6 |
| 1985-86 | 470 | 329 | 70.0 | 627 | 419 | 66.8 |
| TOTAL | 8,981 | 6,073 | 67.6 | 10,662 | 5,898 | 55.3 |

SOURCE: Doctorates Awarded from 1920 to 1971 and Doctorate Recipients from United States Universities, Summary Reports 1971-1986, National Research Council

## TABLE 10-3

DOCTORAL DEGREES BY SEX, 1920-1986

| YEAR | TOTAL BOTH SEXES | WOMEN ONLY | % WOMEN |
|---|---|---|---|
| CY 1920 thru FY 1959* | 293 | 68 | 23.2 |
| FY 1960 thru FY 1969 | 738 | 167 | 22.6 |
| FY 1970-72 | 471 | 123 | 26.1 |
| FY 1973 | 207 | 65 | 31.4 |
| FY 1974 | 167 | 68 | 40.7 |
| FY 1975 | 194 | 70 | 36.1 |
| FY 1976 | 152 | 70 | 46.1 |
| FY 1977 | 190 | 73 | 38.4 |
| FY 1978 | 175 | 65 | 37.1 |
| FY 1979 | 155 | 77 | 49.7 |
| FY 1980 | 182 | 75 | 41.2 |
| FY 1981 | 176 | 78 | 44.3 |
| FY 1982 | 191 | 90 | 47.1 |
| FY 1983 | 164 | 86 | 52.4 |
| FY 1984 | 160 | 82 | 51.3 |
| FY 1985 | 176 | 91 | 51.7 |
| FY 1986 | 189 | 96 | 50.8 |
| TOTAL | 3,980 | 1,444 | 36.3 |

*Data are aggregated on a calendar year (CY) basis from 1920 to 1957 and on a fiscal year (FY) basis from 1958 to the present.

FIELD: Education

SOURCE: Doctorates Awarded from 1920 to 1971 by Subfield of Doctorate, Sex and Decade, March 1973, and Doctorate Recipients from United States Universities, Summary Reports, 1972-1986, National Research Council

## TABLE 10-4

### DOCTORATES AWARDED IN EDUCATION FROM 1920 TO 1986 BY SUBFIELD OF DOCTORATE AND SEX

| SUBFIELD | CY 1920-FY 1972 | | | FY 1973-FY 1982 | | | FY 1983-FY 1984 | | | FY 1985 | | | FY 1986 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W | Total | Women | %W |
| EDUCATION, TOTAL (1) | 69,374 | 13,878 | 20.0 | 74,419 | 27,763 | 37.3 | 13,927 | 7,061 | 50.7 | 6,717 | 3,480 | 51.8 | 6,602 | 3,590 | 54.4 |
| Curriculum and Instruction (5) | 547 | 188 | 34.4 | 7,932 | 3,547 | 44.7 | 1,720 | 1,069 | 62.2 | 823 | 500 | 60.8 | 787 | 485 | 61.6 |
| Educational Admin & Supervision (2) | 12,610 | 1,053 | 8.4 | 15,104 | 3,639 | 24.1 | 3,173 | 1,250 | 39.4 | 1605 | 679 | 42.3 | 1622 | 748 | 46.1 |
| Educational Media (3) | 624 | 67 | 10.7 | 859 | 216 | 25.1 | 170 | 65 | 38.2 | 101 | 50 | 49.5 | 79 | 40 | 50.6 |
| Educational Statistics & Research (4) | | | | 1,015 | 344 | 33.9 | 191 | 88 | 46.1 | 74 | 43 | 58.1 | 57 | 36 | 63.2 |
| Educational Testing, Eval, & Meas(4) | 691 | 110 | 15.9 | 1,016 | 344 | 33.9 | 107 | 45 | 42.1 | 44 | 24 | 54.5 | 47 | 27 | 57.4 |
| Educational & School Psychology (3) | 3,165 | 924 | 29.2 | 4,629 | 2,063 | 44.6 | 701 | 395 | 56.3 | 492 | 273 | 55.5 | 615 | 247 | 59.5 |
| Social Foundations | 2,361 | 535 | 22.7 | 2,169 | 724 | 33.4 | 293 | 114 | 38.9 | 134 | 59 | 44.0 | 122 | 60 | 49.2 |
| Special Education (3) | 1,918 | 535 | 27.9 | 3,132 | 1,590 | 50.8 | 662 | 449 | 67.8 | 270 | 185 | 68.5 | 273 | 197 | 72.2 |
| Student Counselling, Personnel Serv(3) | 4,909 | 1,046 | 21.3 | 6,260 | 2,429 | 38.8 | 892 | 440 | 49.3 | 395 | 209 | 52.9 | 315 | 165 | 52.4 |
| Higher Education (5) | 522 | 96 | 18.4 | 6,352 | 2,050 | 32.3 | 1,286 | 637 | 49.5 | 586 | 288 | 49.1 | 609 | 308 | 50.6 |
| Pre-elementary Education (6) | | | | | | | 117 | 92 | 78.6 | 67 | 57 | 85.1 | 84 | 69 | 82.1 |
| Elementary Education (7) | 2,644 | 1,096 | 41.5 | 2,117 | 1,310 | 61.9 | 208 | 148 | 71.2 | 121 | 90 | 74.4 | 96 | 71 | 75.5 |
| Secondary Education(7) | 2,212 | 375 | 17.0 | 1,668 | 567 | 34.0 | 150 | 84 | 56.0 | 70 | 38 | 54.3 | 86 | 45 | 52.3 |
| Adult & Continuing Education(5) | 251 | 52 | 20.7 | 1,873 | 675 | 36.0 | 439 | 229 | 52.2 | 208 | 113 | 54.3 | 223 | 123 | 55.2 |
| Teaching Field-Agriculture (5) | 459 | 8 | 1.7 | 278 | 13 | 4.7 | 94 | 15 | 16.0 | 40 | 6 | 15.0 | 39 | 4 | 10.3 |
| Teaching Field-Arts (8) | 369 | 103 | 27.9 | 534 | 252 | 47.2 | 99 | 53 | 53.5 | 43 | 25 | 58.1 | 43 | 24 | 55.8 |
| Teaching Field-Business (8) | 685 | 201 | 29.3 | 682 | 266 | 39.0 | 114 | 64 | 56.1 | 52 | 33 | 63.5 | 50 | 29 | 58.0 |
| Teaching Field-English (8) | 563 | 164 | 29.1 | 795 | 415 | 52.2 | 148 | 100 | 67.6 | 68 | 44 | 64.7 | 79 | 53 | 67.1 |
| Teaching Field-Foreign Languages (8) | 168 | 49 | 29.2 | 322 | 164 | 50.9 | 50 | 24 | 48.0 | 30 | 14 | 46.7 | 36 | 24 | 66.7 |
| Teaching Field-Health (6) | | | | | | | 193 | 125 | 64.8 | 89 | 62 | 69.7 | 81 | 55 | 67.9 |
| Teaching Field-Home Economics (8) | 256 | 248 | 96.9 | 309 | 302 | 97.7 | 51 | 49 | 96.1 | 21 | 18 | 85.7 | 17 | 17 | 100.0 |
| Teaching Field-Industrial Arts (8) | 527 | 2 | 0.4 | 422 | 13 | 3.1 | 46 | 7 | 15.2 | 13 | 0 | 0.0 | 20 | 0 | 0.0 |
| Teaching Field-Mathematics (8) | 908 | 150 | 16.5 | 874 | 272 | 31.1 | 126 | 70 | 55.6 | 65 | 32 | 49.2 | 72 | 33 | 45.8 |
| Teaching Field-Music (8) | 906 | 125 | 13.8 | 1,002 | 297 | 29.6 | 204 | 77 | 37.7 | 80 | 23 | 28.8 | 94 | 32 | 34.0 |
| Teaching Field-Nursing (9) | | | | 89 | 88 | 98.9 | 38 | 36 | 94.7 | 21 | 20 | 95.2 | 40 | 37 | 92.5 |
| Physical Education (10) | 2,861 | 783 | 27.4 | 3,476 | 1,209 | 34.8 | 455 | 194 | 42.6 | 220 | 84 | 38.2 | 210 | 80 | 38.1 |
| Reading Education (10) | | | | 1,045 | 802 | 76.7 | 311 | 235 | 75.6 | 113 | 93 | 82.3 | 134 | 112 | 83.6 |
| Science Education (7) | 1,574 | 306 | 19.4 | 1,139 | 262 | 23.0 | 155 | 51 | 32.9 | 88 | 39 | 44.3 | 65 | 22 | 33.8 |
| Social Science Education (8) | 500 | 90 | 18.0 | 528 | 153 | 29.0 | 60 | 32 | 53.3 | 24 | 8 | 33.3 | 22 | 7 | 31.8 |
| Speech Education (12) | | | | 125 | 73 | 58.4 | 12 | 9 | 75.0 | 7 | 3 | 42.9 | 5 | 3 | 60.0 |
| Trade & Industrial Fields (13) | 461 | 26 | 5.6 | 1,914 | 545 | 28.5 | 255 | 88 | 34.5 | 82 | 23 | 28.0 | 86 | 36 | 41.9 |
| Other Teaching Fields (13) | 750 | 309 | 41.2 | 827 | 495 | 59.9 | 87 | 42 | 48.3 | 61 | 30 | 49.2 | 48 | 24 | 50.0 |
| Education, General (1) | 24,816 | 4,896 | 19.7 | 3,844 | 1,584 | 41.2 | 658 | 336 | 51.1 | 303 | 144 | 47.5 | 352 | 189 | 53.7 |
| Education, Other (3) | 1,117 | 341 | 30.5 | 2,088 | 1,060 | 50.8 | 662 | 349 | 52.7 | 307 | 171 | 55.7 | 296 | 188 | 63.5 |

(1) Separated into 'History, American, European,' and 'History, Other' in 1978. (2) Added in 1970 as 'History and Philosophy of Science.' Renamed 'History of Science' in 1984. (3) 'History, Other' combined with 'History, General' in 1983. (4) Name changed from 'Foreign Language & Lit., Classical' in 1966 and renamed 'Classics' in 1983. (5) Added in 1976. (6) Originally named 'Speech as a Dramatic Art.' In 1962, 'Dramatic Arts' was added. (7) Added in 1983. (8) Added in 1973. (9) In 1968, 'Art, Fine & Applied: was broken out into 'Art, Applied' & 'Art, History & Criticism.' (10) Added in 1973. (11) Added in 1978 as 'Theater and Theater Criticism.' Renamed 'Theater' in 1983. (12) This group was separated in 1968. (13) Called 'Modern Foreign Language, Unspecified' until 1965, 'Other Languages' in 1979, and separated in 1983. (14) 'Spanish and Portuguese' prior to 1983. (15) Separated from 'Other Languages' in 1983.

FIELD: Education

SOURCE: Earned Degrees Conferred Series, 1970-71 thru 1985-86, Department of Education Center for Statistics

TABLE 10-5

DEGREES AWARDED BY SEX AND LEVEL OF DEGREE, 1970-71 - 1985-86

| YEAR | BACHELOR'S | | | MASTER'S | | | Ph.D. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women | Total Both Sexes | Women Only | % Women |
| 1970-71 | 177,638 | 132,236 | 74.4 | 89,067 | 50,020 | 56.2 | 6,398 | 1,355 | 21.2 |
| 1971-72 | 192,368 | 142,492 | 74.0 | 98,280 | 56,355 | 57.3 | 7,041 | 1,660 | 23.6 |
| 1972-73 | 195,640 | 143,816 | 73.5 | 105,646 | 61,450 | 58.2 | 7,314 | 1,813 | 24.8 |
| 1973-74 | 186,623 | 137,088 | 73.5 | 112,739 | 67,553 | 59.9 | 7,293 | 1,977 | 27.5 |
| 1974-75 | 168,749 | 123,703 | 73.3 | 120,233 | 74,733 | 62.2 | 7,443 | 2,296 | 30.8 |
| 1975-76 | 156,528 | 114,026 | 72.8 | 128,410 | 82,591 | 64.3 | 7,769 | 2,593 | 33.4 |
| 1976-77 | 143,658 | 103,740 | 72.2 | 126,375 | 83,201 | 65.8 | 7,955 | 2,769 | 34.8 |
| 1977-78 | 137,742 | 99,842 | 72.5 | 118,957 | 80,548 | 67.7 | 7,586 | 2,956 | 39.0 |
| 1978-79 | 127,853 | 93,568 | 73.2 | 111,834 | 76,734 | 68.6 | 7,731 | 3,263 | 42.2 |
| 1979-80 | 120,680 | 89,214 | 73.9 | 103,720 | 72,762 | 70.2 | 7,940 | 3,521 | 44.3 |
| 1980-81 | 108,265 | 81,196 | 75.0 | 98,381 | 70,301 | 71.5 | 7,900 | 3,736 | 47.3 |
| 1981-82 | 101,063 | 76,678 | 75.9 | 93,104 | 67,333 | 72.3 | 7,676 | 3,727 | 48.6 |
| 1982-83 | 97,991 | 74,321 | 75.8 | 84,853 | 61,621 | 72.6 | 7,551 | 3,787 | 50.2 |
| 1983-84 | 92,382 | 70,176 | 76.0 | 77,187 | 55,606 | 72.0 | 7,473 | 3,770 | 50.4 |
| 1984-85 | 88,161 | 66,897 | 75.9 | 76,137 | 55,192 | 72.5 | 7,151 | 3,723 | 52.1 |
| 1985-86 | 87,221 | 66,235 | 75.9 | 76,353 | 55,634 | 72.9 | 7,110 | 3,795 | 53.4 |
| TOTAL | 2,182,562 | 1,615,228 | 74.0 | 1,621,276 | 1,071,634 | 66.1 | 119,331 | 46,741 | 39.2 |

SOURCE: Affirmative Employment Statistics, U.S. Office of Personnel Management, 1987

TABLE 10-6

NUMBER AND PERCENT OF FEDERAL WORKERS EMPLOYED IN EDUCATION BY OCCUPATIONAL TITLE, SEX AND MINORITY STATUS, SEPTEMBER 1986

| OCCUPATION SERIES | ALL EMPLOYEES | | | TOTAL MINORITY | | | | BLACK | | HISPANIC | | ASIAN | | AM. INDIAN | | WHITE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Women | % W | Total | % | Women | % W | No. | % B | No. | % H | No. | % A | No. | % I | No. | % W |
| General Education & Training | 4,377 | 3,062 | 70.0 | 595 | 13.6 | 432 | 9.9 | 344 | 7.9 | 119 | 2.7 | 39 | 0.9 | 93 | 2.1 | 3,782 | 86.4 |
| Education & Vocational Training | 16,384 | 9,962 | 60.8 | 3,071 | 18.7 | 2,103 | 12.8 | 1,216 | 7.4 | 496 | 3.0 | 267 | 1.6 | 1,092 | 6.7 | 13,313 | 81.0 |
| Education Program | 503 | 229 | 45.5 | 188 | 37.4 | 107 | 21.3 | 150 | 29.8 | 26 | 5.2 | 8 | 1.6 | 4 | 0.3 | 315 | 62.6 |
| Public Health Education | 33 | 17 | 51.5 | 15 | 45.5 | 10 | 30.3 | 0 | 0.0 | 1 | 3.0 | 1 | 3.0 | 13 | 39.4 | 18 | 54.5 |
| Education Research | 90 | 31 | 34.4 | 18 | 20.0 | 8 | 8.9 | 11 | 12.1 | 5 | 5.6 | 2 | 2.2 | 0 | 0.0 | 72 | 80.0 |
| Education Services | 369 | 117 | 31.7 | 61 | 16.5 | 28 | 7.6 | 38 | 10.3 | 17 | 4.6 | 5 | 1.4 | 1 | 0.3 | 308 | 83.5 |

## BIBLIOGRAPHY AND DATA SOURCES

**Admissions Testing Program of The College Board**, 45 Columbus Avenue, New York, NY 10023-6917

National Report, College Bound Seniors, 1986 and 1987 copyright by The College Board

Profiles: College board Seniors, 1985, ISBN 0-87447-262-8, copyright by The College Board

**American Anthropological Association**, 1703 New Hampshire Avenue, N.W., Washington, DC 20009

1985 Survey of Departments, August 1985

**American Assembly of Collegiate Schools of Business**, 760 Office Parkway, Suite 50, Creve Cour, MO 63141

Stat Sheet, 1984

Personal Communication, October 1987

**American Association of Colleges of Osteopathic Medicine**, 6110 Executive Blvd., Suite 405, Rockville MD 20852

Annual Statistical Report, 1981; 1982; 1983; 1984; 1985; and 1986

Personal Communication, December 1985

**American Association of Colleges of Pharmacy**, 1426 Prince Street, Alexandriva, VA 22314

Degrees Conferred by Schools and Colleges of Pharmacy, 1975-76 thru 1985-86

Enrollment Report on Professional Degree Programs in Pharmacy, Fall 1976 through Fall 1986

Enrollments in Schools and Colleges of Pharmacy, 1986-87

Graduate Enrollment Report, Fall 1973 through Fall 1977

Graduate Study in Member Colleges, 1974-75

Report of Enrollment in Schools and Colleges of Pharmacy, 1973-74

The Status of Women in Pharmaceutical Education, by Christopher A. Rodowskas, Jr.

**American Association of Colleges of Podiatric Medicine**, 6110 Executive Blvd., Suite 204, Rochville, MD 20852

Reprints from Colleges of Podiatric Medicine Annual Reports to AACPM, 1976-1986, December 1986

Personal Communication

**American Association of Dental Schools**, 1619 Massachusetts Avenue, N.W., Washington, DC 20036
**American Dental Association, Division of Educational Measurements**, 211 E. Chicago Avenue, Chicago, IL 60611

Annual Report on Dental Education Series, 1973-74 through 1986-87

Dental Faculty Information; Suppl. to Annual Report on Dental Education Series, 1985-86 and 1986-87

Personal communication, April 1983; June 1984

Trend Analysis, Supplement 11 to the Annual Report on Dental Education, 1985-86 and 1986-87

**American Bar Association**, 1155 East 60th Street, Chicago, IL 60637

A Review of Legal Education in the United States - Fall 1977; Fall 1978; Fall 1979; Fall 1980; Fall 1981; Fall 1982; Fall 1983; Fall 1984; Fall 1985 and Fall 1986 - Law Schools and Bar Admission Requirements, Section of Legal Education and Admission to the Bar, copyright by A.B.A.

**American Chemical Society**, 1155 - 16th Street, N.W., Washington, DC 20036

Committee on Professional Training, Personal Communication

1976 and 1978 Report of Chemists' Salaries and Employment Status, July 1976; June 1978

Salaries 1981, July 1981; Salaries 1983, June 1983; Salaries 1985, October 1985; Salaries 1987, September 1987

Women Chemists 1985, April 1986

**American Council on Education**, One Dupont Circle, N.W., Washington, DC 20036

The American Freshman: National Norms for Fall 1971 and Fall 1972, ACE Research Reports, Vol. 6, No. 6, 1971 and Vol. 7, No. 5, 1972

1980 Fact Book for Academic Administrators

1986-87 Fact Book on Higher Education, copyright 1987 by American Council on Education and publisher Macmillan Publishing Company, 833 Third Avenue, New York, NY 10022

"Getting to the Top - Women CEOs in Higher Education," by Judy Touchton, Comment, May 1984, Office of Women in Higher Education; and personal communication, September 1985

Minorities in Higher Education, Fourth and Fifth Annual Status Report

**American Council on Education/Office of Research and Cooperative Institutional Research Program**, University of California at Los Angeles, Graduate School of Education, 405 Hilgard Avenue, Los Angeles, CA 90024

The American Freshman: National Norms for Fall 1973 through 1986, Office of Research and Cooperative Institutional Research Program, University of California at Los Angeles

**American Geological Institute**, 4220 King Street, Alexandria, VA 22302

Student Enrollment in Geoscience Departments 1975-76 through 1981-82, 1985-86 and 1986-87 Series

Unpublished Data

"Women in Academia: Students and Professors Revisted," Geology, Vol. 15, August 1987

**American Institute of Architects**, 1735 New York Avenue, N.W., Washington DC 20006

Personal communication, December 1985 and October 1987

**American Institute of Certified Public Accountants**, 1211 Avenue of the Americas, New York, NY 10036

Minority Recruitment and Equal Opportunity Committee 1981 Report, 1982 Report, 1983 Report, 1984 Report and 1986 Report by Sharon L. Donahue

**American Institute of Physics**, 335 East 45th Street, New York, NY 10017

Enrollments and Degrees, AIP Pub. No. R-151.24, June 1987

Graduate Student Survey, AIP Pub. No. R-207.14, May 1982; R-207.16, 1984; R-207.18, August 1986; and R-207-19, September 1987

**American Mathematical Society**, Box 6248, Providence, RI 02904

Notices, Vol. 25, No. 6, Issue No. 188, October 1978; Vol. 29, No. 7, Issue 221, November 1982; Vol. 31, No. 7, November 1984

"First Report on the 30th Annual Survey 1986," Notices, Vol. 33, No. 7, November 1986

**American Medical Association**, 535 N. Dearborn Street, Chicago, IL 60610

Journal of the American Medical Association, Vol. 234, No. 13, December 29, 1975; Vol. 238, No. 26, December 26, 1977; Vol. 240, No. 26, December 20, 1978; Vol 243, No. 9, March 1980; Vol. 246, No. 25, December 1981; Vol. 248, No. 24, December 24/31, 1982, and Vol. 250, No. 12, September 23/30, 1983, copyright by AMA

**American Optometric Association**, 600 Maryland Avenue, S.W., Washington, DC 20002

Information from surveys conducted by the Council on Optometric Education

**American Podiatry Association**, 20 Chevy Chase Circle, N.W., Washington, DC 20015

Personal communication, 1985 and 1987

**American Political Science Association**, 1527 New Hampshire Avenue, N.W., Washington, DC 20036

Graduate Students and Faculty in Political Science: Ph.D. and M.A. Degrees, 1987

"Job Market Remains Stable for Political Scientists," by Robert J-P. Hauck, PS Summer, 1986

**American Psychological Association**, 1200 - 17th Street, N.W., Washington, DC 20036

"Census of Psychological Personnel: 1983," American Psychologist, December 1985

1984 Doctorate Employment Survey, Preliminary Report

Graduate Departments of Psychology, 1985-86, September 1986

Summary Report of 1984-85 Survey of Graduate Departments of Psychology, June 1985

**American Veterinary Medical Association/Association of American Veterinary Medical Colleges** 1522 K Street, N.W., Suite 828, Washington, DC 20005

Personal Communication, November 1980, January 1982; April 1983; June 1984; December 1985; and July 1987

**Association of American Medical Colleges**, One Dupont Circle, N.W., Washington DC 20036

Fact Sheets, February 28, 1985 and October 18, 1985; New Releases, 10/26/84 and 10/28/85

"Medical Student Enrollment," 1973-74 through 1977-78, Journal of Medical Education, Vol. 53, April 1978; and unpublished data

Minority Students in Medical Education, Facts and Figures III, March 1987

Personal Communication

**Association of Schools & Colleges of Optometry**, 600 Maryland Avenue, S.W.. Suite 410, Washington, DC 20024

Unpublished Data

**Association of Schools of Public Health,** 1015 Fifteenth Street, N.W., Suite 404, Washington DC 20005

Unpublished Data, Compiled from 1974-75 through 1985-86

**Civil Service Commission, U.S.** SEE **Office of Personnel Management, U.S.**

**College Entrance Examination Board, Educational Testing Service (ETS),** SEE **Admissions Testing Program**

**Commerce, U.S. Department of, Bureau of the Census,** Washington, DC 20233

Historical Statistics of the U.S.

1980 Census of Occupations, Special EEO File; and Supplementary Report, May 1981

Special Report on Hispanics, 1987

Personal Communication, 1987

**Commission on Professionals in Science and Technology,** 1500 Massachusetts Avenue, N.W., Suite 831, Washington D. C. 20005

General Information

**Education, U.S. Department of, Center for Education Statistics,** 400 Maryland Avenue, S.W. Washington, DC 20202

The Condition of Education, 1986 Edition, CS 86-404

Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, Academic Year 1984-85 and 1980-81, and Data on Enrollments in Higher Education by Race, Ethnicity and Sex, Office for Civil Rights, Unpublished

Digest of Education Statistics, 1981, NCES 81-400; 1982, NCES 82-407; 1985-86, CS 86-400; 1987, CS 87-345

Earned Degrees Conferred, Series 1947-48 through 1985-86

Fall Enrollment in Higher Education 1984 and 1985; as published in the Chronicle of Higher Education, January 22, 1986 and October 15, 1986

High School and Beyond, Longitudinal Survey, First Follow-up; Second Follow-up, October 1985

Preliminary Releases and Unpublished Data

Projections of Education Statistics to 1992-93, NCES 85-408

Women's Participation in First-Professional Degree Programs in Medicine, Dentistry, Veterinary Medicine, and Law, 1969-70 through 1974-75, NCES 76-023

**Education, U. S. Department of,** Office of Educational Research and Improvement, Washington, DC 20208

Elementary and Secondary Education Indicators in Brief, 1987, IS 87-106

**Educational Testing Service,** Graduate Record Examinations Program, Princeton, NJ 08541

A Summary of Data Collected from Graduate Record Examinations Test Takers During 1984-85, Data Summary Report #10, April 1986

**Energy, U.S. Department of,** Washington, DC 20425

Nuclear Engineering Enrollments and Degrees, 1985, DOE/ER-0268, March 1986

Health Physics/Radiation Protection Enrollments and Degrees, 1986, DOE/ER-0324, May 1987

**Engineering Manpower Commission,** 415 Second Street, N.E., Suite 200, Washington, DC 20002

Engineering and Technology Degrees, 1969 through 1986 Series

Engineering and Technology Enrollments, 1969 through 1985 Series; and data from 1986 survey, unpublished

**Health and Human Services, U.S. Department of, Health Resources Administration,** Washington DC 20201

Estimates and Projections of Black and Hispanic Physicians, Dentists, and Pharmacists to 2010, DHHS Pub. No. HRS-P-DV-86-1, May 1986

Minorities and Women in the Health Fields, May 1974; and 1987 Edition, (HRSA) HRS-P-DV 87-1

Women in Health Careers, by Maryland Pennell and Shirlene Showell, DHEW No. HRA 75-55, June 1975

Personal Communication

**Howard, Suzanne, Ph.D.,** Educational Consultant, 402 Tennessee Avenue, Alexandria, VA 22305

Fact Sheet on Women in Education Administration, September 1980

**Institute of International Education,** 809 United Nations Plaza, New York, NY 10017

Open Doors, 1985/86

**Labor, U.S. Department of, Bureau of Labor Statistics**, Washington, DC 20212

Current Population Survey, unpublished, 1986; and personal communication, October 1987

Employment and Earnings Series, 1960, 1970, 1975, 1980, 1985 and January 1987

"Labor Force Projections: 1986 to 2000," Monthly Labor Review, September 1987

**National Academy of Sciences/National Research Council**, 2101 Constitution Ave., N.W., Washington, DC 20418

Doctorates Awarded 1920 to 1971 by Subfield of Doctorate, Sex and Decade, March 1973

Doctorate Records File

Humanities Doctorates in the United States, 1985 Profile

Summary Report, Doctorate Recipients from United States Universities, 1962-86 Series

Survey of Earned Doctorates, Unpublished Data 1987

Unpublished Data

Women in Engineering, Medicine and Science by Vera Kistiakowsky, The Conference on Women in Science and Engineering, June 11-12, 1973

**National Center for Education Statistics**, SEE **Education, U.S. Department of**

**National Center for Health Statistics**, Room 1-57, 3700 East West Highway, Hyattsville, MD 20782

Personal Communication

**National Education Association**, Office of Research, 1201 - 16th Street, N.W., Washington, DC 20036

Estimates of School Statistics, 1980-81, 1981-83, 1982-83, 1983-84, 1984-85, 1985-86, and 1986-87

**National Science Foundation**, 1800 G Street, N.W., Washington, DC 20550

Academic Science, Graduate Enrollment and Support, Fall 1980, Detailed Statistical Tables, NSF 81-330, 1981; Fall 1981, NSF 83-305; Fall 1982, NSF 84-306

Academic Science/Engineering: Graduate Enrollment and Support, Fall 1983. Detailed Statistical Tables, NSF 85-300; Fall 1984, unpublished; Fall 1985, unpublished; and Fall 1986, unpublished

Academic Science/Engineering: Postdoctorates and Other Nonfaculty Research Staff in Doctorate Institutions, October 1986, unpublished

Academic Science: Scientists and Engineers, January 1981, NSF 82-305; January 1982, NSF 83-311;

Academic Science/Engineering: Scientists and Engineers, January 1984, NSF 85-316; and January 1985, unpublished

Characteristics of Doctoral Scientists and Engineers in the United States: 1985

Characteristics of Recent Science/Engineering Graduates: 1986, Detailed Statistical Tables, in press.

Early Release of Summary Statistics on Academic Science/Engineering Resources, October 1986

Federal Scientists and Engineers: 1985, Detailed Statistical Tables

Foreign Citizens in U.S. Science and Engineering: History, Status and Outlook, Special Report, NSF 86-305 Revised, December 1986

Foreign Participation in U.S. Science and Engineering Education and Labor Markets, Special Report, NSF 81-316, September 1981

Profiles - Chemistry: Human Resources and Funding, Special Report, NSF 87-307

Science and Engineering Doctorates: 1960-85, Detailed Statistical Tables

Women and Minorities in Science and Engineering, January 1986, NSF 86-301

**National Science Teachers Association**, 1742 Connecticut Avenue, N.W., Washinton, DC 20009

1985-86 Survey of Science and Math Teachers, unpublished

**Office of Personnel Management, U.S.**, Washington, DC 20415

Federal Civilian Workforce Statistics, Affirmative Employment Statistics, September 30, 1986

Occupations of Federal White Collar and Blue Collar Workers, October 31, 1985

**Population Reference Bureau**, 2213 M Street, N.W., Washington, DC 20036

Asian Americans: Growth, Change and Diversity

**Women's College Coalition**, 1725 K Street, N.W., Washington, DC 20006

Profile of Women's College Presidents, December 1984 and September 1985

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